

Req 49 h) Lineamientos para el diseño de planes de remediación de resultados de pruebas de penetración. (Evidencia de la aplicación)

A continuación, se enlistan las actualizaciones necesarias para la remediación de las vulnerabilidades de severidad alta detectadas en el Reporte de vulnerabilidades:

Severidad	CVSS v3.0	VPR Score	EPSS Score	Plugin	Name
Alta	7.5	6.7	0.1591	156103	Apache Log4j 1.2 JMSAppender Remote Code Execution (CVE-2021-4104)
Alta	7.5	6.0	0.0009	202704	Oracle Java SE Multiple Vulnerabilities
Alta	7.4	6.0	0.0009	207298	Oracle Java SE Multiple Vulnerabilities

1) Actualización de KERNEL del SO

```
admin@MLG-DISTSANTAROSALIA:~  
login as: admin  
admin@172.16.0.180's password:  
Last login: Thu Mar 20 09:54:13 2025 from 172.16.0.1  
[admin@MLG-DISTSANTAROSALIA ~]$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: eno1: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000  
    link/ether 5c:ed:8c:a1:f8:c0 brd ff:ff:ff:ff:ff:ff  
    altname enp2s0f0  
    inet 192.168.1.1/24 brd 192.168.1.255 scope global noprefixroute eno1  
        valid_lft forever preferred_lft forever  
    inet6 2806:101e:7:4ccb:5eed:8cff:feal:f8c0/64 scope global dynamic noprefixroute  
        valid_lft 86258sec preferred_lft 86258sec  
    inet6 fe80::5eed:8cff:feal:f8c0/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
3: eno2: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc mq state DOWN group default qlen 1000  
    link/ether 5c:ed:8c:a1:f8:c1 brd ff:ff:ff:ff:ff:ff  
    altname enp2s0f1  
4: wg0: <POINTOPOINT,NOARP,UP,LOWER_UP> mtu 1420 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/none  
    inet 172.16.0.180/32 scope global wg0  
        valid_lft forever preferred_lft forever  
[admin@MLG-DISTSANTAROSALIA ~]$ sudo dnf update
```

```

rpm                                x86_64                                4.16.1.3-34.el9.0.1                baseos                                485 k
rpm-build-libs                     x86_64                                4.16.1.3-34.el9.0.1                baseos                                88 k
rpm-libs                           x86_64                                4.16.1.3-34.el9.0.1                baseos                                307 k
rpm-plugin-audit                   x86_64                                4.16.1.3-34.el9.0.1                baseos                                15 k
rpm-plugin-selinux                 x86_64                                4.16.1.3-34.el9.0.1                baseos                                16 k
rpm-plugin-systemd-inhibit         x86_64                                4.16.1.3-34.el9.0.1                appstream                             16 k
rpm-sign-libs                      x86_64                                4.16.1.3-34.el9.0.1                baseos                                20 k
selinux-policy                     noarch                                 38.1.45-3.el9_5                    baseos                                48 k
selinux-policy-targeted            noarch                                 38.1.45-3.el9_5                    baseos                                6.5 M
shadow-utils                       x86_64                                2:4.9-10.el9_5                     baseos                                1.1 M
snappy                             x86_64                                1.1.8-8.el9.0.1                    baseos                                33 k
socat                              x86_64                                1.7.4.1-6.el9                      appstream                             299 k
sssd-client                        x86_64                                2.9.5-4.el9_5.4                    baseos                                161 k
sssd-common                        x86_64                                2.9.5-4.el9_5.4                    baseos                                1.6 M
sssd-kcm                           x86_64                                2.9.5-4.el9_5.4                    baseos                                109 k
systemd                            x86_64                                252-46.el9_5.3                     baseos                                4.0 M
systemd-libs                       x86_64                                252-46.el9_5.3                     baseos                                671 k
systemd-pam                        x86_64                                252-46.el9_5.3                     baseos                                278 k
systemd-resolved                   x86_64                                252-46.el9_5.3                     baseos                                378 k
systemd-rpm-macros                 noarch                                 252-46.el9_5.3                     baseos                                66 k
systemd-udev                       x86_64                                252-46.el9_5.3                     baseos                                1.9 M
tar                                x86_64                                2:1.34-7.el9                       baseos                                875 k
tpm2-tss                           x86_64                                3.2.3-1.el9                        baseos                                594 k
tzdata                             noarch                                 2025a-1.el9                        baseos                                429 k
udisks2                            x86_64                                2.9.4-11.el9                       appstream                             471 k
util-linux                         x86_64                                2.37.4-20.el9                     baseos                                2.2 M
util-linux-core                    x86_64                                2.37.4-20.el9                     baseos                                437 k
vim-minimal                        x86_64                                2:8.2.2637-21.el9                 baseos                                670 k
wget                                x86_64                                1.21.1-8.el9_4                    appstream                             768 k
xfsprogs                           x86_64                                6.4.0-4.el9_5                     baseos                                1.1 M
yum                                 noarch                                 4.14.0-17.el9                     baseos                                87 k

Installing dependencies:
attr                               x86_64                                2.5.1-3.el9                        baseos                                58 k
ed                                 x86_64                                1.14.2-12.el9                     baseos                                74 k
info                               x86_64                                6.7-15.el9                         baseos                                224 k
kernel-core                        x86_64                                5.14.0-503.31.1.el9_5             baseos                                18 M
kernel-devel                       x86_64                                5.14.0-503.31.1.el9_5             appstream                             18 M
kernel-modules                     x86_64                                5.14.0-503.31.1.el9_5             baseos                                36 M
kernel-modules-core                x86_64                                5.14.0-503.31.1.el9_5             baseos                                30 M
keyutils                           x86_64                                1.6.3-1.el9                       baseos                                72 k
patch                              x86_64                                2.7.6-16.el9                      appstream                             127 k

Transaction Summary
-----
Install  10 Packages
Upgrade  218 Packages

Total download size: 790 M
Is this ok [y/N]: Y
Downloading Packages:
(1/228): attr-2.5.1-3.el9.x86_64.rpm                                69 kB/s | 58 kB  00:00
(2/228): ed-1.14.2-12.el9.x86_64.rpm                               83 kB/s | 74 kB  00:00
(3/228): info-6.7-15.el9.x86_64.rpm                                232 kB/s | 224 kB  00:00
(4/228): keyutils-1.6.3-1.el9.x86_64.rpm                           478 kB/s | 72 kB  00:00
[MIRROR] kernel-modules-core-5.14.0-503.31.1.el9_5.x86_64.rpm: Status code: 404 for http://nyc.mirrors.clouvider.net/rocky/9.5/BaseOS/x86_64/os/Packages/k/kernel-modules-core-5.14.0-503.31.1.el9_5.x86_64.rpm (IP: 94.154.159.241)
[MIRROR] kernel-modules-5.14.0-503.31.1.el9_5.x86_64.rpm: Status code: 404 for http://nyc.mirrors.clouvider.net/rocky/9.5/BaseOS/x86_64/os/Packages/k/kernel-modules-5.14.0-503.31.1.el9_5.x86_64.rpm (IP: 94.154.159.241)
[MIRROR] kernel-core-5.14.0-503.31.1.el9_5.x86_64.rpm: Status code: 404 for http://nyc.mirrors.clouvider.net/rocky/9.5/BaseOS/x86_64/os/Packages/k/kernel-core-5.14.0-503.31.1.el9_5.x86_64.rpm (IP: 94.154.159.241)
(5/228): kernel-core-5.14.0-503.31.1.el9_5.x86_64.rpm              2.1 MB/s | 18 MB  00:08
(6-8/228): kernel-5.14.0-503.31.1.el9_5.x86_64.rpm                9% [=====] 7.0 MB/s | 73 MB  01:42 ETA

```

```
kpartx-0.8.7-32.el9.x86_64
libblkid-2.37.4-20.el9.x86_64
libbtrfs-2.5-3.el9.0.1.x86_64
libdnf-0.69.0-12.el9.x86_64
libfdisk-2.37.4-20.el9.x86_64
libgomp-11.5.0-5.el9_5.x86_64
libmnl-1.0.4-16.el9_4.x86_64
libnftnl-1.0.1-23.el9_5.x86_64
libsemanage-3.6-2.1.el9_5.x86_64
libsss_certmap-2.9.5-4.el9_5.4.x86_64
libsss_sudo-2.9.5-4.el9_5.4.x86_64
libtdb-1.4.10-1.el9.x86_64
libuser-0.63-15.el9.x86_64
linux-firmware-20250212-146.4.el9_5.noarch
lvm2-libs-9.2.03.24-2.el9.x86_64
nano-5.6.1-6.el9.x86_64
nss-3.101.0-10.el9_5.x86_64
nss-sysinit-3.101.0-10.el9_5.x86_64
oniguruma-6.9.6-1.el9_6.x86_64
openssh-server-8.7p1-43.el9.x86_64
openssl-libs-1:3.2.2-6.el9_5.1.x86_64
p11-kit-trust-0.25.3-3.el9_5.x86_64
pcr2-10.40-6.el9.x86_64
perl-Net-SSLeay-1.94-1.el9.x86_64
polkit-0.117-13.el9.x86_64
postgresql12-contrib-12.22-1PGDG.rhel9.x86_64
python-unversioned-command-3.9.21-1.el9_5.noarch
python3-dnf-plugins-core-4.3.0-16.el9.noarch
python3-libdnf-0.69.0-12.el9.x86_64
python3-pip-wheel-21.3.1-1.el9.noarch
python3-systemd-234-19.el9.x86_64
rocky-repos-9.5-1.2.el9.noarch
rpm-libs-4.16.1.3-34.el9.0.1.x86_64
rpm-plugin-systemd-inhibit-4.16.1.3-34.el9.0.1.x86_64
selinux-policy-targeted-38.1.45-3.el9_5.noarch
socat-1.7.4-1-6.el9.x86_64
sssd-kcm-2.9.5-4.el9_5.4.x86_64
systemd-pam-252-46.el9_5.3.x86_64
systemd-udev-252-46.el9_5.3.x86_64
tzdata-2025a-1.el9.noarch
util-linux-core-2.37.4-20.el9.x86_64
xfspggs-6.4.0-4.el9.x86_64
xutils-1.13-3.el9.x86_64
ed-1.14.2-12.el9.x86_64
kernel-devel-5.14.0-503.31.1.el9_5.x86_64
patch-2.7.6-16.el9.x86_64
info-6.7-15.el9.x86_64
kernel-modules-5.14.0-503.31.1.el9_5.x86_64
kernel-5.14.0-503.31.1.el9_5.x86_64
kernel-modules-core-5.14.0-503.31.1.el9_5.x86_64
less-590-5.el9.x86_64
libbrotli-1.0.9-7.el9_5.x86_64
libdb-5.3.28-54.el9.x86_64
libevent-2.1.12-8.el9_4.x86_64
libgcrypt-1.10.0-11.el9.x86_64
libldb-2.9.1-2.el9.x86_64
libndp-1.9-1.el9.x86_64
libnghttp2-1.43.0-6.el9.x86_64
libsolv-0.7.24-3.el9.x86_64
libsss_nss_idmap-2.9.5-4.el9_5.4.x86_64
libtalloc-2.4.2-1.el9.x86_64
libudisks2-2.9.4-11.el9.x86_64
libxml2-2.9.13-6.el9_5.2.x86_64
lvm2-9.2.03.24-2.el9.x86_64
microcode_ctl-4.20240910-1.20250211.1.el9_5.noarch
nspr-4.35.0-17.el9_5.x86_64
nss-softokn-freebl-3.101.0-10.el9_5.x86_64
numactl-libs-2.0.18-2.el9.x86_64
openssh-clients-8.7p1-43.el9.x86_64
openssl-devel-1:3.2.2-6.el9_5.1.x86_64
p11-kit-0.25.3-3.el9_5.x86_64
pcrc-8.44-4.el9.x86_64
perl-IO-Socket-SSL-2.073-2.el9.noarch
pgdg-redhat-repo-42.0-46PGDG.noarch
postgresql12-12.22-1PGDG.rhel9.x86_64
postgresql12-server-12.22-1PGDG.rhel9.x86_64
python3-dnf-4.14.0-17.el9.noarch
python3-hawkey-0.69.0-12.el9.x86_64
python3-nftables-1:1.0.9-3.el9.x86_64
python3-setuptools-wheel-53.0.0-13.el9.noarch
rocky-release-9.5-1.2.el9.noarch
rpm-build-libs-4.16.1.3-34.el9.0.1.x86_64
rpm-plugin-selinux-4.16.1.3-34.el9.0.1.x86_64
selinux-policy-38.1.45-3.el9_5.noarch
snappy-1.1.8-8.el9.0.1.x86_64
sssd-common-2.9.5-4.el9_5.4.x86_64
systemd-libs-252-46.el9_5.3.x86_64
systemd-rpm-macros-252-46.el9_5.3.noarch
tpm2-tss-3.2.3-1.el9.x86_64
util-linux-2.37.4-20.el9.x86_64
wget-1.21.1-8.el9_4.x86_64
```

complete!
admin@MLG-DISTSANTAROSALIA ~\$

```
lvm2-libs-9.2.03.24-2.el9.x86_64
nano-5.6.1-6.el9.x86_64
nss-3.101.0-10.el9_5.x86_64
nss-sysinit-3.101.0-10.el9_5.x86_64
oniguruma-6.9.6-1.el9_6.x86_64
openssh-server-8.7p1-43.el9.x86_64
openssl-libs-1:3.2.2-6.el9_5.1.x86_64
p11-kit-trust-0.25.3-3.el9_5.x86_64
pcr2-10.40-6.el9.x86_64
perl-Net-SSLeay-1.94-1.el9.x86_64
polkit-0.117-13.el9.x86_64
postgresql12-contrib-12.22-1PGDG.rhel9.x86_64
python-unversioned-command-3.9.21-1.el9_5.noarch
python3-dnf-plugins-core-4.3.0-16.el9.noarch
python3-libdnf-0.69.0-12.el9.x86_64
python3-pip-wheel-21.3.1-1.el9.noarch
python3-systemd-234-19.el9.x86_64
rocky-repos-9.5-1.2.el9.noarch
rpm-libs-4.16.1.3-34.el9.0.1.x86_64
rpm-plugin-systemd-inhibit-4.16.1.3-34.el9.0.1.x86_64
selinux-policy-targeted-38.1.45-3.el9_5.noarch
socat-1.7.4-1-6.el9.x86_64
sssd-kcm-2.9.5-4.el9_5.4.x86_64
systemd-pam-252-46.el9_5.3.x86_64
systemd-udev-252-46.el9_5.3.x86_64
tzdata-2025a-1.el9.noarch
util-linux-core-2.37.4-20.el9.x86_64
xfspggs-6.4.0-4.el9.x86_64
xutils-1.13-3.el9.x86_64
ed-1.14.2-12.el9.x86_64
kernel-devel-5.14.0-503.31.1.el9_5.x86_64
patch-2.7.6-16.el9.x86_64
info-6.7-15.el9.x86_64
kernel-modules-5.14.0-503.31.1.el9_5.x86_64
kernel-5.14.0-503.31.1.el9_5.x86_64
kernel-modules-core-5.14.0-503.31.1.el9_5.x86_64
microcode_ctl-4.20240910-1.20250211.1.el9_5.noarch
nspr-4.35.0-17.el9_5.x86_64
nss-softokn-freebl-3.101.0-10.el9_5.x86_64
numactl-libs-2.0.18-2.el9.x86_64
openssh-clients-8.7p1-43.el9.x86_64
openssl-devel-1:3.2.2-6.el9_5.1.x86_64
p11-kit-0.25.3-3.el9_5.x86_64
pcrc-8.44-4.el9.x86_64
perl-IO-Socket-SSL-2.073-2.el9.noarch
pgdg-redhat-repo-42.0-46PGDG.noarch
postgresql12-12.22-1PGDG.rhel9.x86_64
postgresql12-server-12.22-1PGDG.rhel9.x86_64
python3-dnf-4.14.0-17.el9.noarch
python3-hawkey-0.69.0-12.el9.x86_64
python3-nftables-1:1.0.9-3.el9.x86_64
python3-setuptools-wheel-53.0.0-13.el9.noarch
rocky-release-9.5-1.2.el9.noarch
rpm-build-libs-4.16.1.3-34.el9.0.1.x86_64
rpm-plugin-selinux-4.16.1.3-34.el9.0.1.x86_64
selinux-policy-38.1.45-3.el9_5.noarch
snappy-1.1.8-8.el9.0.1.x86_64
sssd-common-2.9.5-4.el9_5.4.x86_64
systemd-libs-252-46.el9_5.3.x86_64
systemd-rpm-macros-252-46.el9_5.3.noarch
tpm2-tss-3.2.3-1.el9.x86_64
util-linux-2.37.4-20.el9.x86_64
wget-1.21.1-8.el9_4.x86_64
```

complete!
admin@MLG-DISTSANTAROSALIA ~\$ sudo dnf upgrade

```
sudo! password for admin:
ostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64 408 B/s | 659 B 00:01
ostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64 2.4 MB/s | 2.4 kB 00:00
Importing GPG key 0x08B40D20:
Userid      : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"
Fingerprint: D4BF 08AE 67A0 B4C7 A1DB CCD2 40BC A2B4 08B4 0D20
From        : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL
Is this ok [y/N]: Y
ostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64 132 kB/s | 376 kB 00:02
Last metadata expiration check: 0:00:01 ago on Thu Mar 20 11:44:56 2025.
Dependencies resolved.
Nothing to do.
complete!
admin@MLG-DISTSANTAROSALIA ~$
```

2) Actualización de JAVA

Versión actual jdk-17.0.9

```
GNU nano 5.6.1 /opt/wildfly/bin/standalone.conf
# -- shell-script -- #####
##
## JBoss Bootstrap Script Configuration
##
#####
#
# This file is optional; it may be removed if not needed.
#
# Specify the maximum file descriptor limit, use "max" or "maximum" to use
# the default, as queried by the system.
#
# Defaults to "maximum"
#MAX_FD="maximum"
#
# Specify the profiler configuration file to load.
#
# Default is to not load profiler configuration file.
#PROFILER=""
#
# Specify the location of the Java home directory. If set then $JAVA will
# be defined to $JAVA_HOME/bin/java, else $JAVA will be "java".
#JAVA_HOME="/opt/java/jdk"
#
# Specify the exact Java VM executable to use.
#JAVA=""
JAVA_HOME="/opt/jdk-17.0.9"
JBOSS_HOME="/opt/wildfly"
JBOSS_USER=wildfly

if [ "x$JBOSS_MODULES_SYSTEM_PKGS" = "x" ]; then
  JBOSS_MODULES_SYSTEM_PKGS="org.jboss.byteman"
fi

# Uncomment the following line to prevent manipulation of JVM options
# by shell scripts.

^C Help      ^C Write Out  ^W Where Is   ^X Cut        ^E Execute    ^L Read 76 lines
^X Exit      ^R Read File  ^A Replace    ^N Paste      ^J Justify    ^C Location
^C Location  ^G Go To Line ^M Undo       ^M-A Set Mark  ^M- To Bracket ^M- Previous  ^M- Back
^C Location  ^G Go To Line ^M Undo       ^M-G Copy      ^C Where Was   ^M- Next      ^M- Forward

19°C
Soleado
```

```
polkit-0.117-13.el9.x86_64      polkit-libs-0.117-13.el9.x86_64      postgresql12-12.22-1PGDG.rhel9.x86_64
postgresql12-contrib-12.22-1PGDG.rhel9.x86_64      python-unversioned-command-3.9.21-1.el9_5.noarch
python3-dnf-plugins-core-4.3.0-16.el9.noarch        python3-firewall-1.3.4-9.el9_5.noarch
python3-libdnf-0.69.0-12.el9.x86_64                python3-libs-3.9.21-1.el9_5.x86_64
python3-pip-wheel-21.3.1-1.el9.noarch               python3-rpm-4.16.1.3-34.el9.0.1.x86_64
python3-systemd-234-19.el9.x86_64                  python3-rpm-4.16.1.3-34.el9.0.1.x86_64
rocky-repos-9.5-1.2.el9.noarch                      rpm-4.16.1.3-34.el9.0.1.x86_64
rpm-libs-4.16.1.3-34.el9.0.1.x86_64                 rpm-plugin-audit-4.16.1.3-34.el9.0.1.x86_64
rpm-plugin-systemd-inhibit-4.16.1.3-34.el9.0.1.x86_64 rpm-sign-libs-4.16.1.3-34.el9.0.1.x86_64
selinux-policy-targeted-38.1.45-3.el9_5.noarch      shadow-utils-2.4.9-10.el9_5.x86_64
socat-1.7.4-1-6.el9.x86_64                          sssd-client-2.9.5-4.el9_5.4.x86_64
sssd-kcm-2.9.5-4.el9_5.4.x86_64                     systemd-252-46.el9_5.3.x86_64
systemd-pam-252-46.el9_5.3.x86_64                  systemd-resolved-252-46.el9_5.3.x86_64
systemd-udev-252-46.el9_5.3.x86_64                  tar-2.11.34-7.el9.x86_64
tzdata-2025a-1.el9.noarch                          udisks2-2.9.4-11.el9.x86_64
util-linux-core-2.37.4-20.el9.x86_64                vim-minimal-2:8.2.2637-21.el9.x86_64
xfsprogs-6.4.0-4.el9.x86_64                         yum-4.14.0-17.el9.noarch
wget-1.21.1-8.el9_4.x86_64

Installed:
attr-2.5.1-3.el9.x86_64      ed-1.14.2-12.el9.x86_64      info-6.7-15.el9.x86_64      kernel-5.14.0-503.31.1.el9_5.x86_64
kernel-core-5.14.0-503.31.1.el9_5.x86_64      kernel-devel-5.14.0-503.31.1.el9_5.x86_64      kernel-modules-5.14.0-503.31.1.el9_5.x86_64      kernel-modules-core-5.14.0-503.31.1.el9_5.x86_64
keyutils-1.6.3-1.el9.x86_64      patch-2.7.6-16.el9.x86_64

Complete!
[admin@MLG-DISTSANTAROSALIA ~]$ sudo dnf upgrade
[sudo] password for admin:
PostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64      408 B/s | 659 B      00:01
PostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64      2.4 MB/s | 2.4 kB      00:00
Importing GPG key 0x08B40D20:
  Userid      : "PostgreSQL RPM Repository <pgsql-pkg-yum@lists.postgresql.org>"
  Fingerprint : D49E 08AE 67A0 B4C7 A10E CCD2 40BC A2B4 08B4 0D20
  From        : /etc/pki/rpm-gpg/PGDG-RPM-GPG-KEY-RHEL
Is this ok [y/N]: Y
PostgreSQL 17 for RHEL / Rocky / AlmaLinux 9 - x86_64      132 kB/s | 376 kB      00:02
Last metadata expiration check: 0:00:01 ago on Thu Mar 20 11:44:56 2025.
Dependencies resolved.
Nothing to do.
Complete!
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo nano /etc/profile.d/sh.local
[sudo] password for admin:
[admin@MLG-DISTSANTAROSALIA ~]$ sudo nano /opt/wildfly/bin/standalone.conf
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo nano /opt/wildfly/bin/standalone.conf
[sudo] password for admin:
[admin@MLG-DISTSANTAROSALIA ~]$ sudo systemctl stop eftvcvolapp
[admin@MLG-DISTSANTAROSALIA ~]$ sudo rm -rf /opt/jdk-17.0.9/
[sudo] password for admin:
[admin@MLG-DISTSANTAROSALIA ~]$
```

```
admin@MLG-DISTSANTAROSALIA:~$ sudo tar xvfz ./jdk-17.0.12 linux-x64 bin.tar.gz
jdk-17.0.12/bin/README
jdk-17.0.12/bin/jar
jdk-17.0.12/bin/jarsigner
jdk-17.0.12/bin/java
jdk-17.0.12/bin/javac
jdk-17.0.12/bin/javadoc
jdk-17.0.12/bin/javap
jdk-17.0.12/bin/jcmd
jdk-17.0.12/bin/jconsole
jdk-17.0.12/bin/jdb
jdk-17.0.12/bin/jdeprscan
jdk-17.0.12/bin/jdeps
jdk-17.0.12/bin/jfr
jdk-17.0.12/bin/jhsdb
jdk-17.0.12/bin/jimage
jdk-17.0.12/bin/jinfo
jdk-17.0.12/bin/jlink
jdk-17.0.12/bin/jmap
jdk-17.0.12/bin/jmod
jdk-17.0.12/bin/jpackage
jdk-17.0.12/bin/jps
jdk-17.0.12/bin/jrunscript
jdk-17.0.12/bin/jshell
jdk-17.0.12/bin/jstack
jdk-17.0.12/bin/jstat
jdk-17.0.12/bin/jstatd
jdk-17.0.12/bin/keytool
jdk-17.0.12/bin/rmiregistry
jdk-17.0.12/bin/serialver
jdk-17.0.12/conf/logging.properties
jdk-17.0.12/conf/management/jmxremote.access
jdk-17.0.12/conf/management/jmxremote.password.template
jdk-17.0.12/conf/management/management.properties
jdk-17.0.12/conf/net.properties
jdk-17.0.12/conf/sdp/sdp.conf.template
jdk-17.0.12/conf/security/java.policy
jdk-17.0.12/conf/security/java.security
jdk-17.0.12/conf/security/policy/README.txt
jdk-17.0.12/conf/security/policy/limited/default_US_export.policy
jdk-17.0.12/conf/security/policy/limited/default_local.policy
jdk-17.0.12/conf/security/policy/limited/exempt_local.policy
jdk-17.0.12/conf/security/policy/unlimited/default_US_export.policy
jdk-17.0.12/conf/security/policy/unlimited/default_local.policy
jdk-17.0.12/conf/sound.properties
jdk-17.0.12/include/classfile_constants.h
jdk-17.0.12/include/jawt.h
jdk-17.0.12/include/jdwpTransport.h
```

```
GNU nano 5.6.1 /opt/wildfly/bin/standalone.conf Modified
# This file is optional; it may be removed if not needed.
#
# Specify the maximum file descriptor limit, use "max" or "maximum" to use
# the default, as queried by the system.
# Defaults to "maximum"
#MAX_FD="maximum"
#
# Specify the profiler configuration file to load.
# Default is to not load profiler configuration file.
#
#PROFILER=""
#
# Specify the location of the Java home directory. If set then $JAVA will
# be defined to $JAVA_HOME/bin/java, else $JAVA will be "java".
#
#JAVA_HOME="/opt/java/jdk"
#
# Specify the exact Java VM executable to use.
#
#JVM=""
#
#JAVA_HOME="/opt/java/jdk"
JBoss_HOME="/opt/wildfly"
JBoss_USER=wildfly

if [ "$JBoss_MODULES_SYSTEM_PKGS" = "x" ]; then
JBoss_MODULES_SYSTEM_PKGS="org.jboss.byteman"
fi

# Uncomment the following line to prevent manipulation of JVM options
# by shell scripts.
#
#PRESERVE_JAVA_OPTS=true
#
# Specify options to pass to the Java VM.
if [ "$JBoss_MODULES_SYSTEM_PKGS" = "x" ]; then
```

3) Actualización de WILDFLY

Generar carpetas.

sudo groupadd --system wildfly

sudo useradd -s /sbin/nologin --system -d /opt/wildfly -g wildfly wildfly

sudo mkdir /etc/wildfly

```
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo groupadd --system wildfly

[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo useradd -s /sbin/nologin --system -d /opt/wildfly -g wildfly wildfly

[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo mkdir /etc/wildfly
```

sudo tar xvfz wildfly-26.1.3.Final.tar.gz (extraer los archivos) de versión -26.1.3.Final.

```
admin@MLG-DISTSANTAROSALIA:~$
wildfly-26.1.3.Final/modules/system/layers/base/com/microsoft/azure/storage/main/azure-storage-8.6.6.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/microsoft/azure/storage/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/ibm/async/asyncutil/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/ibm/async/asyncutil/main/asyncutil-0.1.0.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/ben-manes/caffeine/main/caffeine-2.9.3.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/ben-manes/caffeine/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/spullara/mustache/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/spullara/mustache/main/compiler-0.9.10.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/msg-simple/main/msg-simple-1.1.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/msg-simple/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/jackson-coreutils/main/jackson-coreutils-1.8.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/jackson-coreutils/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/btf/main/btf-1.2.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/btf/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/json-patch/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/github/fge/json-patch/main/json-patch-1.9.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/h2database/h2/main/h2-1.4.197.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/h2database/h2/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/googlecode/javaewah/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/googlecode/javaewah/main/javaewah-1.1.13.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/classmate/main/classmate-1.5.1.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/classmate/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-databind/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-databind/main/jackson-databind-2.12.7.1.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-core/main/jackson-core-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-core/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-annotations/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/core/jackson-annotations/main/jackson-annotations-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/datatype/jackson-datatype-jdk8/main/jackson-datatype-jdk8-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/datatype/jackson-datatype-jdk8/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/datatype/jackson-datatype-jsr310/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/datatype/jackson-datatype-jsr310/main/jackson-datatype-jsr310-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-base-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-base-provider/main/jackson-jaxrs-base-provider-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-base-provider/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-json-provider/main/jackson-module-jaxb-annotations-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-json-provider/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/dataformat/jackson-dataformat-yaml/main/jackson-dataformat-yaml-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/dataformat/jackson-dataformat-yaml/main/module.xml
wildfly-26.1.3.Final/domain/configuration/domain.xml
wildfly-26.1.3.Final/domain/configuration/logging.properties
wildfly-26.1.3.Final/domain/configuration/host.xml
wildfly-26.1.3.Final/domain/configuration/mgmt-groups.properties
wildfly-26.1.3.Final/domain/configuration/default-server-logging.properties
wildfly-26.1.3.Final/domain/configuration/host-slave.xml
wildfly-26.1.3.Final/domain/configuration/host-master.xml
wildfly-26.1.3.Final/domain/configuration/application-users.properties
wildfly-26.1.3.Final/domain/configuration/mgmt-users.properties
[admin@MLG-DISTSANTAROSALIA ~]$
```

```
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-json-provider/main/jackson-jaxrs-json-provider-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-json-provider/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/jaxrs/jackson-jaxrs-json-provider/main/jackson-module-jaxb-annotations-2.12.7.jar
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/dataformat/jackson-dataformat-yaml/main/module.xml
wildfly-26.1.3.Final/modules/system/layers/base/com/fasterxml/jackson/dataformat/jackson-dataformat-yaml/main/jackson-dataformat-yaml-2.12.7.jar
wildfly-26.1.3.Final/domain/configuration/application-roles.properties
wildfly-26.1.3.Final/domain/configuration/domain.xml
wildfly-26.1.3.Final/domain/configuration/logging.properties
wildfly-26.1.3.Final/domain/configuration/host.xml
wildfly-26.1.3.Final/domain/configuration/mgmt-groups.properties
wildfly-26.1.3.Final/domain/configuration/default-server-logging.properties
wildfly-26.1.3.Final/domain/configuration/host-slave.xml
wildfly-26.1.3.Final/domain/configuration/host-master.xml
wildfly-26.1.3.Final/domain/configuration/application-users.properties
wildfly-26.1.3.Final/domain/configuration/mgmt-users.properties
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$
[admin@MLG-DISTSANTAROSALIA ~]$ sudo cp -R wildfly-26.1.3.Final /opt/
sudo ln -s /opt/wildfly-26.1.3.Final /opt/wildfly
sudo cp /opt/wildfly/docs/contrib/scripts/systemd/wildfly.conf /etc/wildfly/
sudo cp /opt/wildfly/docs/contrib/scripts/systemd/wildfly.service /etc/systemd/system/
sudo cp /opt/wildfly/docs/contrib/scripts/systemd/launch.sh /opt/wildfly/bin/
sudo chmod +x /opt/wildfly/bin/launch.sh
```

Permisos de conexión de wildfly

```
GNU nano 5.6.1 /opt/wildfly/standalone/configuration/standalone.xml
</application-security-domains>
</subsystem>
<subsystem xmlns="urn:jboss:domain:webservices:2.0" statistics-enabled="${wildfly.webservices.statistics-enabled:${wildfly.statistics-enabled:false}}">
  <wsdl-host>${jboss.bind.address:127.0.0.1}</wsdl-host>
  <endpoint-config name="Standard-Endpoint-Config"/>
  <endpoint-config name="Recording-Endpoint-Config">
    <pre-handler-chain name="recording-handlers" protocol-bindings="##SOAP11_HTTP ##SOAP11_HTTP_MTOM ##SOAP12_HTTP ##SOAP12_HTTP_MTOM">
      <handler name="RecordingHandler" class="org.jboss.ws.common.invocation.RecordingServerHandler"/>
    </pre-handler-chain>
  </endpoint-config>
  <client-config name="Standard-Client-Config"/>
</subsystem>
<subsystem xmlns="urn:jboss:domain:weld:4.0"/>
</profile>
<interfaces>
  <interface name="management">
    <any-address/>
  </interface>
  <interface name="public">
    <any-address/>
  </interface>
</interfaces>
<socket-binding-group name="standard-sockets" default-interface="public" port-offset="${jboss.socket.binding.port-offset:0}">
  <socket-binding name="ajp" port="${jboss.ajp.port:8009}">
    <socket-binding name="http" port="${jboss.http.port:8080}">
      <socket-binding name="https" port="${jboss.https.port:8443}">
        <socket-binding name="management-http" interface="management" port="${jboss.management.http.port:9990}">
          <socket-binding name="management-https" interface="management" port="${jboss.management.https.port:9993}">
            <socket-binding name="txn-recovery-environment" port="4712"/>
            <socket-binding name="txn-status-manager" port="4713"/>
            <outbound-socket-binding name="mail-smtp">
              <remote-destination host="${jboss.mail.server.host:localhost}" port="${jboss.mail.server.port:25}">
            </outbound-socket-binding>
          </socket-binding>
        </socket-binding>
      </socket-binding>
    </socket-binding>
  </socket-binding-group>
<deployments>
  <deployment name="commercial-services.war" runtime-name="commercial-services.war" enabled="false">
    <content sha1="5357f956ebabe0c61e669a0cdbc2eeel6d370749"/>
  </deployment>
  <deployment name="eftcvoljvt.war" runtime-name="eftcvoljvt.war">
    <content sha1="c4f8520956562eada0802284c1925515eedc47d7"/>
  </deployment>
  <deployment name="eftcvoljvtacv.war" runtime-name="eftcvoljvtacv.war" enabled="false">
    <content sha1="d9791ef4f1b32e070ecd76da2e242db0bb580242"/>
  </deployment>
  <deployment name="eftcvolui.war" runtime-name="eftcvolui.war">
```