Oracle Cloud Infrastructure Labs
Oracle OEL password rotation
V2.0

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By
Oracle Sales Consulting Norway
Inge Os

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1. Disclaimer

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Overview

Lab Overview

The lab exercises are designed to complement your training, reinforcing the key concepts by applying and demonstrating what you learned in the presentation sessions. This lab book is comprised of individual exercises. These exercises allow you to get first hands-on exposure working with the Oracle Cloud Infrastructure, Oracle OCI, using a demo environment, where you will see how key features and functionality are deployed in the software. Using what you learn in the presentations and individual exercises working with the software, you will collaborate as a team in developing and delivering practice presentations.

Linux instance Password unlock and password lock recovery

Lab Overview

Since Oracle OCI 18.1, all Oracle OEL instance templates has been configured with a 90 day password expiry. If password is not changed within 90 days, both the Oracle OPC and ROOT account password expires, so it is not possible to SSH to OPC and sudo root on the machine instances. To avid this the password expire period can be removed when the instance is created.

Removal of 90 day password rotation on newly created Instances

Run the following script as root (sudo bash) to remove the 90 day password expiry:

```
if [ "$EUID" -ne 0 ]
    then echo "Please run under sudo, or as root"
    exit 1
fi
if [[ $( grep -c "Maipo" /etc/redhat-release ) -gt 0 ]]
    # Oracle Linux 7
    then CMD_PREFIX=/usr
else
    CMD_PREFIX=""
fi
# Fix existing users
if [[ $( $CMD_PREFIX/bin/grep -c ":90:7:90:" /etc/shadow ) -gt 0 ]]; then
    echo "Fixing affected users"
    $CMD_PREFIX/bin/sed -i.bkp 's/:90:7:90:/:99999:7::/g' /etc/shadow
fi
# Change the defaults from useradd: /etc/default/useradd

if [[ $( $CMD_PREFIX/bin/egrep -c "^INACTIVE=90" /etc/default/useradd ) -gt 0 ]];
then
    echo "Fixing useradd defaults"
    $CMD_PREFIX/bin/sed -i.bkp '/INACTIVE=90/d' /etc/default/useradd
    $CMD_PREFIX/bin/sed -i.bkp2 's/#INACTIVE=-1/INACTIVE=-1/g'
/etc/default/useradd
fi
# Change the PAM defaults for new users
if [[ $( $CMD_PREFIX/bin/egrep -c "^PASS_MAX_DAYS 90" /etc/login.defs ) -gt 0 ]];
then
    echo "Fixing PAM defaults"
    $CMD_PREFIX/bin/sed -i.bkp '/PASS_MAX_DAYS 90/d' /etc/login.defs
    $CMD_PREFIX/bin/sed -i.bkp2 's/#PASS_MAX_DAYS\s*99999/PASS_MAX_DAYS 99999/g'
/etc/login.defs
fi
```

Script is available on git as oci_oel_remove_pwd_rotation.sh

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Recovery from opc account password expired

If you are unable to log in. Do not terminate the inaccessible instance. You will need to perform the recovery steps below to regain access. You will need to detach the boot volume (see Step 1), attach the boot volume to another instance (see Step 2), and then execute the commands provided in Step 3 and then reattach the boot volume to the original instance. Please note, steps 1 – 4 must be performed on each inaccessible instance listed above.

Step 1: Detaching Boot Volume from the inaccessible instance

1. In the Console, click Compute.

2. Choose your Compartment.

3. In the Instances list, select the inaccessible instance.

4. Click the name of the instance to display the instance details.

5. If the instance is not already off, turn the instance off using the console.

6. In the Resources, click Boot Volume.

7. Click the Actions icon (...), for the boot volume.

8. Click Detach and confirm the selection when prompted.

Step 2: Attaching a Boot Volume to a recovery instance

1. Create a new VM instance from the rescue operation.

2. In the Console, click Compute.

3. Choose your Compartment.

4. In the Instances list, select the recovery instance you want to attach the boot volume to.

5. Click the name of the instance to display the instance details.

6. In the Resources, click Attached Boot Volume.

7. Click the Actions icon (…) for the boot volume.

8. Click Attach, select the Paravirtualized option and confirm the selection when prompted.

Step 3: Recover the user account

Run the following script as root:

```bash
#!/bin/bash
#
# (C) Inge Os 2018
#
set -eu
if [ "$EUID" -ne 0 ]
   then echo "Please run under sudo, or as root"
   exit 1
fi
if [[ $( grep -c "Maipo" /etc/redhat-release ) -gt 0 ]]
   # Oracle Linux 7
   then CMD_PREFIX=/usr
else
   CMD_PREFIX=""
fi
mkdir /root/temp
$CMD_PREFIX/bin/mount -o nouuid /dev/sdb3 /root/temp
touch /root/temp/.autorelabel
# Fix existing users
if [[ $( $CMD_PREFIX/bin/grep -c ":90:7:90:" /root/temp/etc/shadow ) -gt 0 ]]; then
   echo "Fixing affected users"
   $CMD_PREFIX/bin/sed -i.bkp 's/:90:7:90:/:99999:7::/g' /root/temp/etc/shadow
fi
# Change the defaults from useradd: /etc/default/useradd
if [[ $( $CMD_PREFIX/bin/egrep -c "^INACTIVE=90" /root/temp/etc/default/useradd ) -gt 0 ]]; then
   echo "Fixing useradd defaults"
   $CMD_PREFIX/bin/sed -i.bkp '/INACTIVE=90/d' /root/temp/etc/default/useradd
   $CMD_PREFIX/bin/sed -i.bkp2 's/#INACTIVE=-1/INACTIVE=-1/g' /root/temp/etc/default/useradd
fi
# Change the PAM defaults for new users
if [[ $( $CMD_PREFIX/bin/egrep -c "^PASS_MAX_DAYS 90" /root/temp/etc/login.defs ) -gt 0 ]]; then
   echo "Fixing PAM defaults"
   $CMD_PREFIX/bin/sed -i.bkp '/PASS_MAX_DAYS 90/d' /root/temp/etc/login.defs
   $CMD_PREFIX/bin/sed -i.bkp2 's/#PASS_MAX_DAYS\s*99999/PASS_MAX_DAYS 99999/g' /root/temp/etc/login.defs
fi
$CMD_PREFIX/bin/umount /root/temp
```

Step 4: Detaching Boot Volume

1.   In the Console, click Compute.

2.   Choose your Compartment.

3.   In the Instances list, select the recovery instance.

4.   Click the name of the instance to display the instance details.

5.   In the Resources, click Boot Volume.

6.   Click the Actions icon (…), for the boot volume.

7.   Click Detach and confirm the selection when prompted.

Step 5: Reattach boot volume

1.   In the Console, click Compute.

2.   Choose your Compartment.

3.   In the Instances list, select the instance originally owned this boot volume.

4.   Click the name of the instance to display the instance details.

5.   In the Resources, click Boot Volume.

6.   Click the Actions icon (…) for the boot volume.

7.   Click Attach and confirm the selection when prompted.