

# MITEL PERFORMANCE ANALYTICS

RELEASE 3.1

UPGRADE GUIDE



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Mitel Performance Analytics Upgrade Guide  
Release 3.1 - May 13, 2020

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# INTRODUCTION

Mitel Performance Analytics is a fault and performance management system designed to provide users with fast actionable problem resolution so that optimal service quality levels are maintained for end customers.

Mitel Performance Analytics provides real-time alerts, detailed reporting and ubiquitous accessibility with secure remote access.

## DOCUMENT PURPOSE AND INTENDED AUDIENCE

This document is intended for Mitel Performance Analytics deployments where the software is installed on a server in the customer network.

For Mitel Performance Analytics Software as a Service (SaaS) deployments, where the software is hosted in the cloud, refer to the Mitel Performance Analytics online help.

This document contains instructions for upgrading an existing Mitel Performance Analytics 3.0.1 or later system to the latest available release.

For a complete description of Mitel Performance Analytics, refer to its online help.

## REVISION HISTORY

| DOCUMENT DATE    | DESCRIPTION  |
|------------------|--|
| October 8, 2015  | Initial version of document  |
| December 2, 2015 | Updated to reflect MarWatch R5.1   |
| February 4, 2016 | Added procedure for upgrading from 5.1.x to 5.1.y                            |
| April 7, 2016    | Mitel Performance Analytics R2.0 General Availability                        |
| January 11, 2017 | Mitel Performance Analytics R2.1 General Availability                        |
| May 1, 2017      | Corrections to procedure for upgrading from MPA 2.1 with Internet connection |
| November 2, 2017 | Mitel Performance Analytics R2.2 General Availability                        |
| July 31, 2019    | Mitel Performance Analytics R2.3 General Availability                        |
| January 16, 2019 | Mitel Performance Analytics R3.0 General Availability                        |
| May 13, 2020     | Mitel Performance Analytics R3.1 General Availability                        |

# SYSTEM UPGRADE

## BEFORE YOU BEGIN

Ensure that your current Mitel Performance Analytics system contains valid email addresses for each Mitel Performance Analytics user. Starting with MarWatch Release 5.1, Mitel Performance Analytics uses user email addresses to send password reset links and to populate report recipient fields.

Do a full backup of your Mitel Performance Analytics data. See "Backing up your Data" on page 8 for instructions.

The process to use depends upon your current version of Mitel Performance Analytics.

### To upgrade from 3.0.x.y

- The recommended approach is to deploy the 3.1.0 OVA and restore the 3.0 backup. See "Upgrade Procedure – Deploy OVA and Restore Backup" on page 8
- Alternately, you can do the following:
  - First upgrade to 3.0.3, (refer to the Mitel Performance Analytics 3.0 Upgrade Guide for instructions)
  - Then run the system upgrade scripts and upgrade to 3.1.0. See "Upgrade Procedure" on page 6

### (To upgrade from 3.1.x.y (applicable to Field Trials only))

- For Mitel Performance Analytics versions 3.1.0.228 or earlier, upgrade to 3.1.0.282 by one of the following methods:
  - Run the system update scripts. See "Update Procedure " on page 7
  - Deploy the 3.1.0.282 OVA and restore the backup file. See "Upgrade Procedure – Deploy OVA and Restore Backup" on page 8
- **Exception:** If you are upgrading from release versions 3.1.0.241 or 3.1.0.250, deploy the 3.1.0.282 OVA and restore a backup from a 3.1.0.228 load or prior. See "Upgrade Procedure – Deploy OVA and Restore Backup" on page 8

**Caution:** Mitel Performance Analytics is shutdown during the upgrade process which may take 15-60 minutes.

# UPGRADE PROCEDURE

The following procedure assumes your on-premise Mitel Performance Analytics server is connected to the Internet and can access the `packages.martellotech.com` server. If your server is not connected to the internet, see "Upgrade Procedure – Deploy OVA and Restore Backup" on page 8.

Before you upgrade to Mitel Performance Analytics version 3.1 you must already be on version 3.0.3.29 or later. The scripts referred to in the procedure below upgrade both your operating system to Linux 18.04 and your Mitel Performance Analytics version to 3.1.

**Important:** Ensure you have created a full backup of your Mitel Performance Analytics data before beginning this procedure.

### Upgrading Mitel Performance Analytics to Version 3.1

Do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to upgrade.
2. Log in as `mwadmin`.
3. To ensure your system is running the latest version of Mitel Performance Analytics 3.0, run the following commands:

```
sudo apt update
sudo apt install martello-meta mpa-3.0
sudo update-mpa
```
4. When prompted for the `sudo` password, supply the `mwadmin` password. The system displays available updates and asks you if you want to proceed.
5. Confirm your intent. The system is upgraded to Mitel Performance Analytics 3.1.
6. Run the following command:

```
sudo upgrade-system-os-stage-1
```
7. Confirm your intent. The operating system is upgraded to Linux 16.04 and the system reboots.
8. Log in to the server again as `mwadmin`.
9. Run the following command again:

```
sudo upgrade-system-os-stage-2
```
10. Confirm your intent. The operating system is upgraded to Linux 18.04, Mitel Performance Analytics is upgraded to version 3.1, and then the system reboots.
11. Log in to the server again as `mwadmin`.
12. Run the following command :

```
sudo upgrade-system-os-stage-3
```
13. Confirm your intent. The final updates and applied to your system.
14. Perform the steps in "Updating Linux and Mitel Performance Analytics" on page 7
15. Perform the steps in "Post-Upgrade Steps" on page 9

## UPDATE PROCEDURE

The following procedure assumes your on-premise Mitel Performance Analytics server is connected to the Internet and can access the `packages.martellotech.com` server. If your server is not connected to the internet, see "Upgrade Procedure – Deploy OVA and Restore Backup" on page 8.

To apply a more recent update of Mitel Performance Analytics to your current installation (i.e. update from 3.1.0.228 to 3.1.0.282), do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to upgrade.
2. Log in as `mwadmin`.
3. Run the following command:  
`sudo update-mpa`

Note: Once you run this script to update to the most recent version, you cannot revert to the previously installed version. If you need to revert after upgrading, refer to the "Roll-Back Procedure" on page 9

4. When prompted for the `sudo` password, supply the `mwadmin` password.  
The system displays available updates and asks you if you want to proceed.
5. Confirm your intent.  
The system applies the available updates.
6. Perform the steps in "Updating Linux and Mitel Performance Analytics" on page 7
7. Perform the steps in "Post-Upgrade Steps" on page 9

## UPDATING LINUX AND MITEL PERFORMANCE ANALYTICS

Once you install or upgrade Mitel Performance Analytics, you might also need to update the server operating system Linux kernel.

Do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to upgrade.
2. Log in as `mwadmin`.
3. Run the following command:  
`sudo update-mpa`
4. When prompted for the `sudo` password, supply the `mwadmin` password. This is the password that was configured when Mitel Performance Analytics was initially installed.  
The system displays available updates and asks you if you want to proceed.
5. Confirm your intent.  
The system applies the available updates.  
Mitel recommends that you restart your VM if the applied updates include updates to the Linux kernel.
6. Perform the steps in "Post-Upgrade Steps" on page 9

# UPGRADE PROCEDURE – DEPLOY OVA AND RESTORE BACKUP

This section explains how to upgrade your Mitel Performance Analytics server to the latest available release when a full OVA install is required, or when it is not connected to the Internet (on premises).

**Note:** The upgraded Mitel Performance Analytics server must use the same fully qualified domain name as the previous server, from which the back-up was taken. It might be necessary to change the DNS configuration to ensure the FQDN resolves to the static IP address of the upgraded server.

The following is an overview of the process:

1. Backup your data using the `mpa-backup` script and store it on another machine or network location. See "Backing up your Data" on page 8 for detailed instructions.
2. Install and test the latest Mitel Performance Analytics server. See the *Mitel Performance Analytics Installation and Maintenance Guide* for detailed instructions.
3. Copy the backup file to the machine hosting the new Mitel Performance Analytics server.
4. Use the `mpa-restore` script to restore data. See "Restoring your Data" on page 9 for detailed instructions.

## BACKING UP YOUR DATA

If you are backing up a system prior to Mitel Performance Analytics 3.1, do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to backup.
2. Log in as `mwadmin`.
3. Run the `mw-backup` script using `sudo`. By default the backup file is saved in the `mwadmin` home directory.  

```
sudo ./scripts/mw-backup.sh
```
4. When prompted for the `sudo` password, supply the `mwadmin` password.
5. After the script ends, copy the resulting backup file to another machine or network location.
6. Shut down this Mitel Performance Analytics server. This is necessary, as the server to which the data is being restored must use the same fully qualified domain name.

If you are backing Mitel Performance Analytics 3.1 or later, do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to backup.
2. Log in as `mwadmin`.
3. Run the `mpa-backup` script using `sudo`. By default the backup file is saved in the `mwadmin` home directory.  

```
sudo mpa-backup
```
4. When prompted for the `sudo` password, supply the `mwadmin` password.
5. After the script ends, copy the resulting backup file to another machine or network location.
6. Shut down this Mitel Performance Analytics server. This is necessary, as the server to which the data is being restored must use the same fully qualified domain name.

## INSTALLING AND TESTING THE LATEST MITEL PERFORMANCE ANALYTICS SERVER

Do the installation steps in the *Mitel Performance Analytics Installation and Maintenance Guide*.



## RESTORING YOUR DATA

**Important:** The target server must have the same fully qualified domain name as the server upon which the backup was run.

Do the following steps:

1. Open a terminal window to the Mitel Performance Analytics server you want to restore.
2. Log in as `mwadmin`.
3. Transfer the desired backup file to the local Mitel Performance Analytics server.
4. Run the `mpa-restore` script using `sudo`:  


```
sudo mpa-restore <backup-file.tar.gz>
```

Example:

```
sudo mpa-restore mpaserver-backup-1474127212.tar.gz
```
5. Ensure the DNS system is configured so that the fully qualified domain name for the Mitel Performance Analytics system (i.e. `mpaserver.mycompany.net`) resolves to the static IP address of the restored server.
6. Perform the steps in "Post-Upgrade Steps" on page 9

## POST-UPGRADE STEPS

After completing the upgrade, verify Mitel Performance Analytics connectivity by doing the following steps:

1. Use a Web browser to access Mitel Performance Analytics and log into the system your administrator account from before the upgrade.
2. Display the **About** screen by clicking **About** under the **User**  menu. The **About** screen displays the Mitel Performance Analytics software version.  
**Note:** You may need to clear your browser cache in order to display the new Mitel Performance Analytics software version.
3. Verify that the displayed software version matches the intended Mitel Performance Analytics version.
4. Ensure you are accessing the topmost or root container of Mitel Performance Analytics. Select **Configuration** under the **System Administration** menu.
5. If necessary, register Mitel Performance Analytics and assign License IDs to containers.
6. Provide a Mapquest API key to enable maps.
7. Navigate the Mitel Performance Analytics data structure and verify that it contains all of the data from before the upgrade.

## ROLL-BACK PROCEDURE

If you cannot connect to the upgraded Mitel Performance Analytics system, or if you want to restore Mitel Performance Analytics to the previous version, deploy a new installation of the required version and restore the data that you backed up in "Before you Begin" on page 5.

To backup your data, see "Backing up your Data" on page 8

To restore your data, see "Restoring your Data" on page 9

# PROBE UPDATE

At a minimum of every six months, you should check for and run updates on all of the Probes that exist in your system.

To run these updates, the installed Mitel Performance Analytics server must have:

- An Internet connection
- Access to the `packages.martellotech.com` website

Run the `sudo update-mpa` command to download and install the Probe software updates (OVA or Martello Appliance probes only) to the server where the Probe software is installed.

**Note:** To update MSL and Windows Probes, you must download and re-install the Probe software.

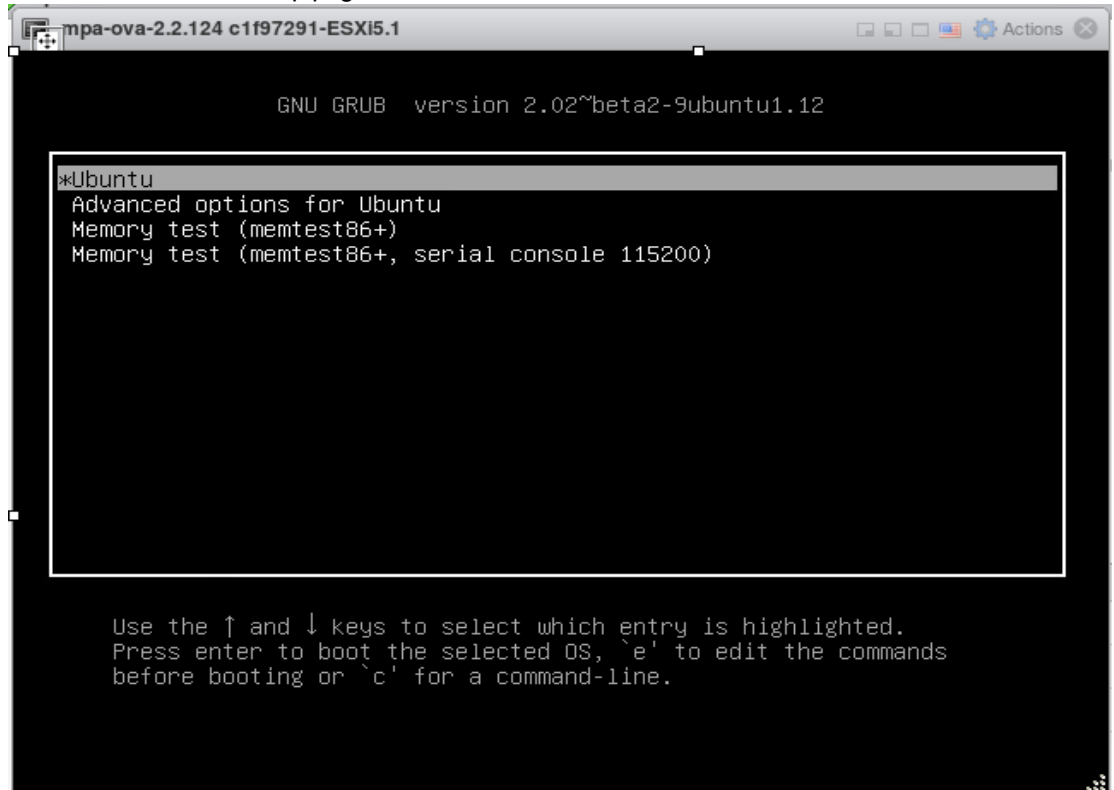
For more detailed instructions, see the procedures described in the *Mitel Performance Analytics Probe Installation and Configuration Guide*.

## RESETTING THE MWADMIN PASSWORD

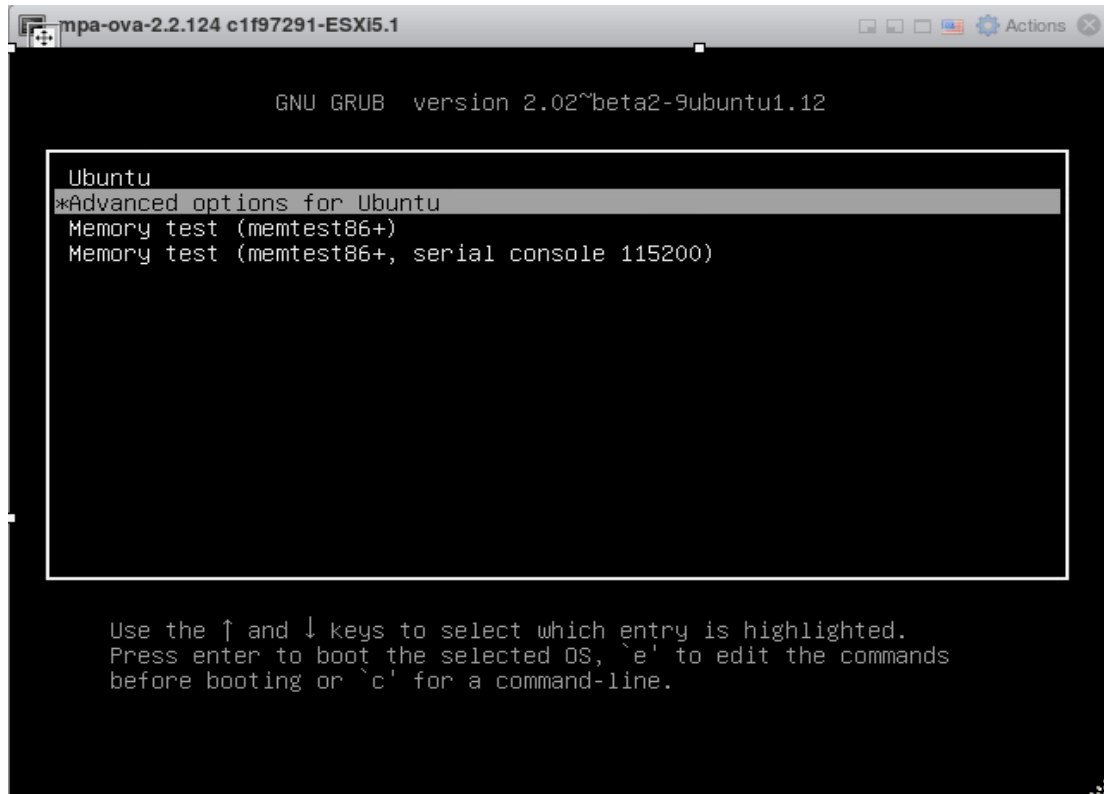
If you forget the MWADMIN password that was set during the Mitel Performance Analytics installation process, you can reset the password.

To reset the MWADMIN password, do the following:

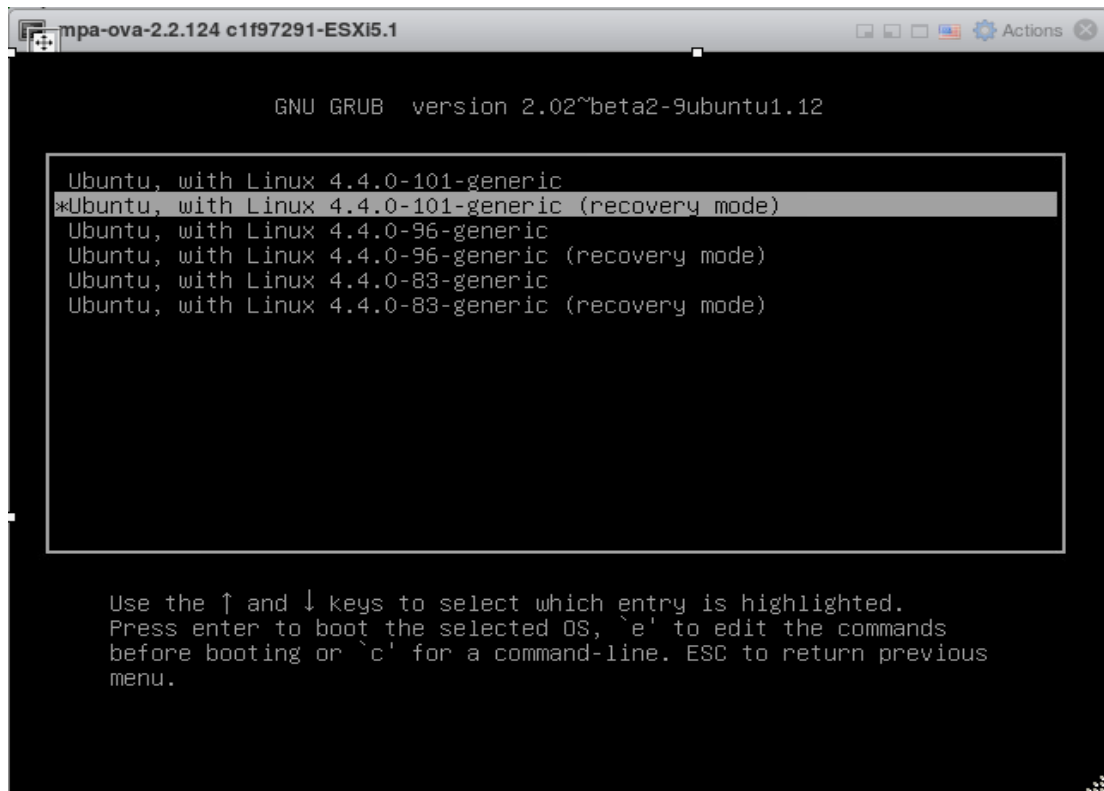
1. From the vSphere client console shut down the Mitel Performance Analytics server.
2. Power on the Mitel Performance Analytics server while holding down the Shift key to display the "GNU GRUB" start up page.



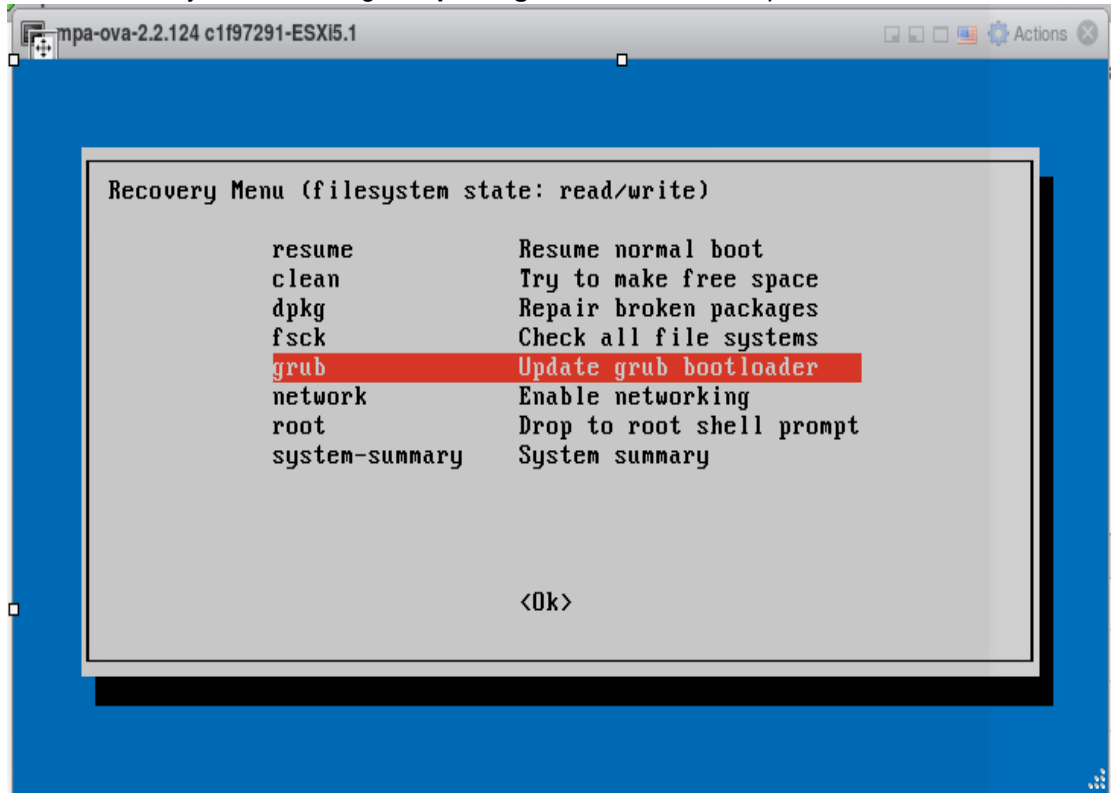
3. Using the keyboard Up and Down arrow keys, select **Advanced options for Ubuntu** from the menu and press Enter.



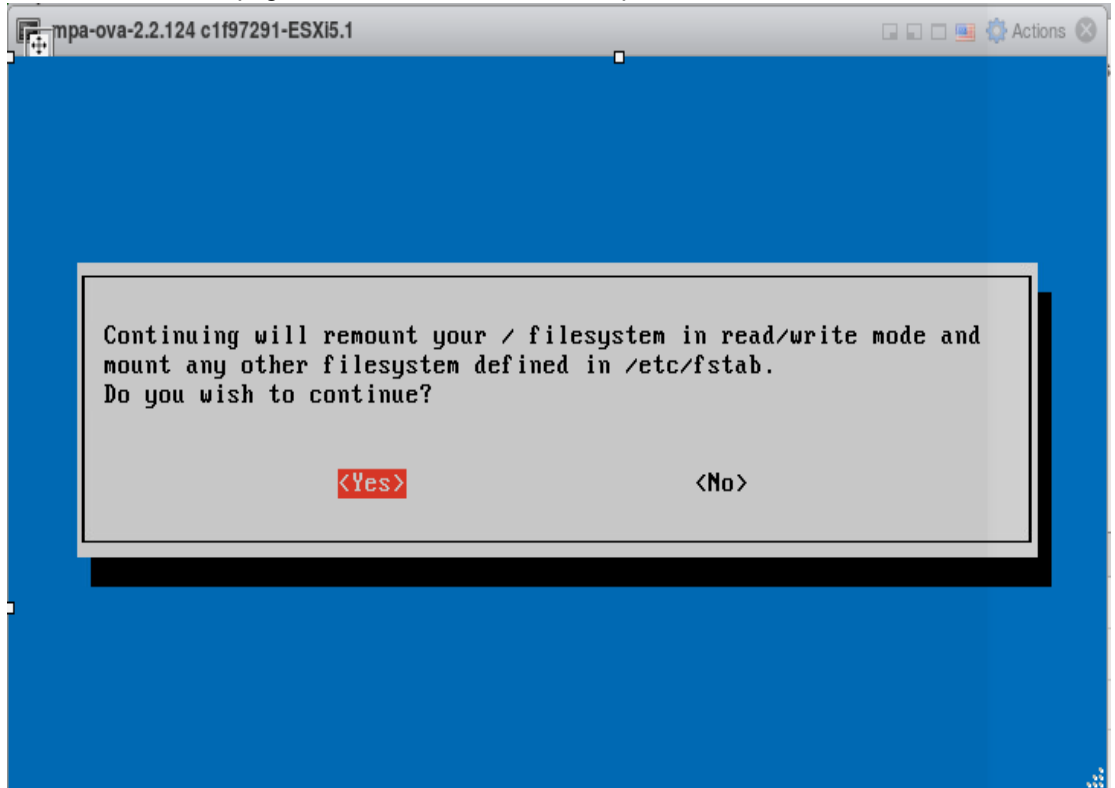
4. Select the first "recovery mode" item from menu and press Enter.  
**Note:** Your kernel numbers will not be the same as shown below.



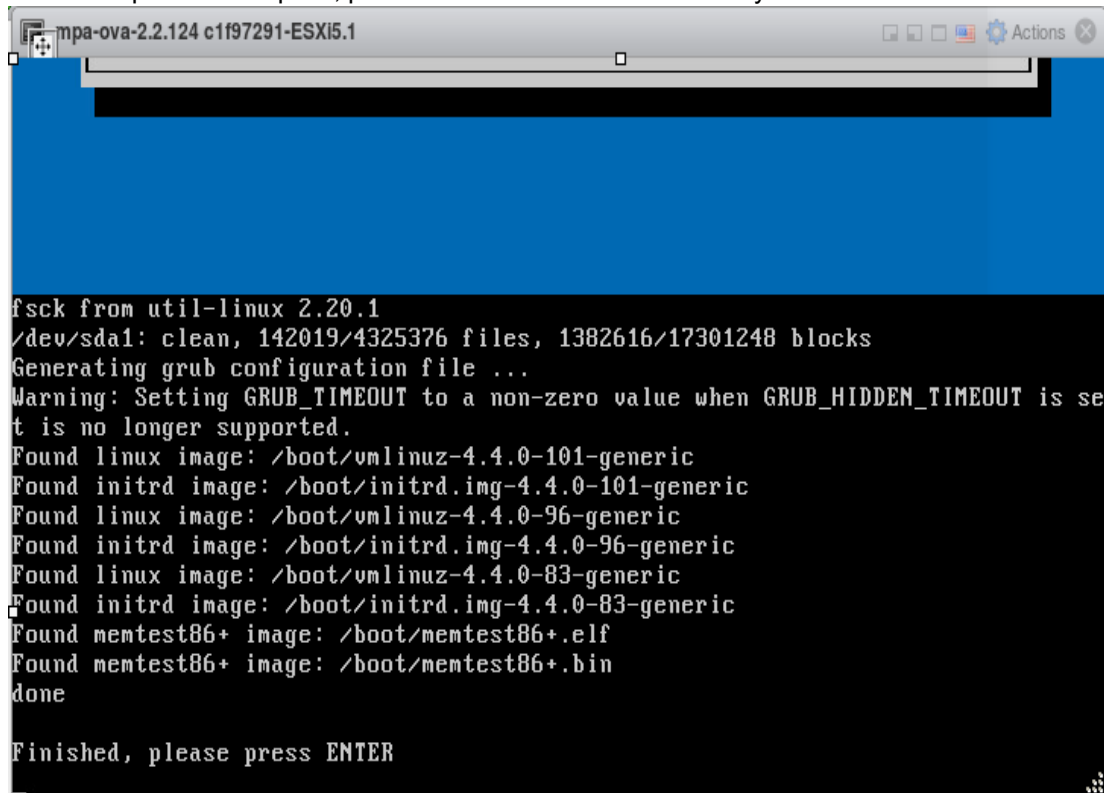
5. On the Recovery Menu, select **grub Update grub bootloader** and press Enter.



6. On the confirmation page, ensure **Yes** is selected and press Enter.



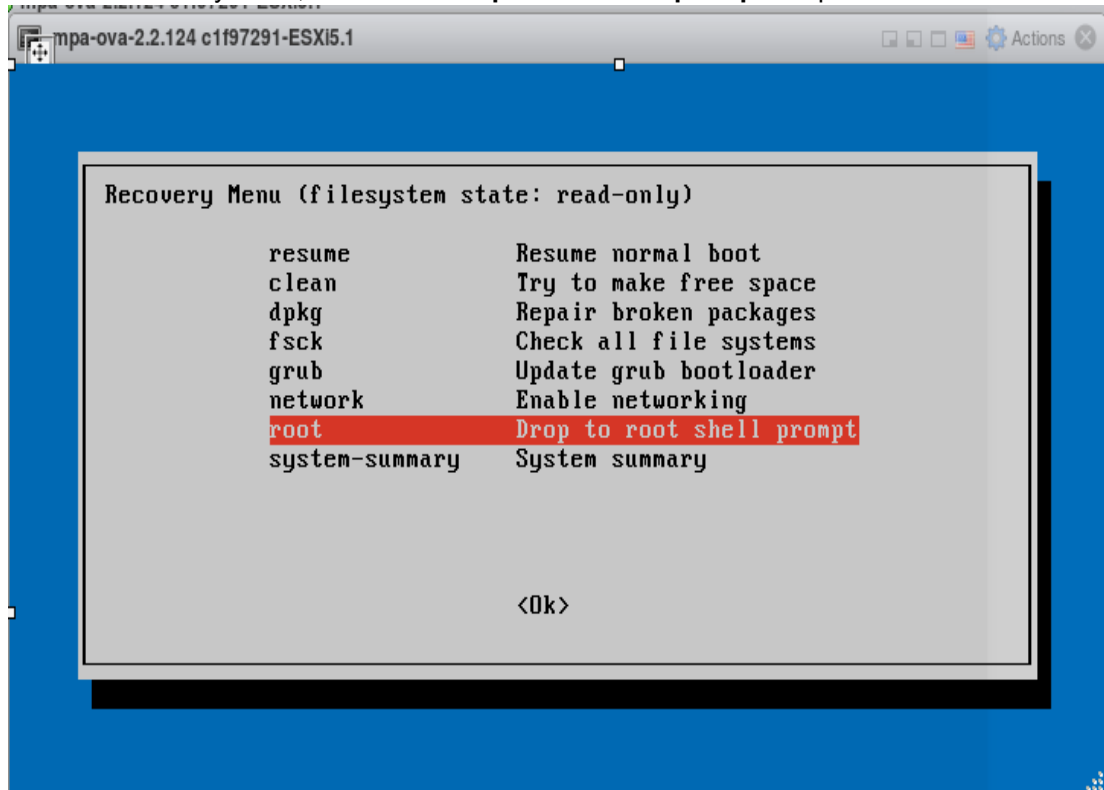
7. Once the update is complete, press Enter to return to the Recovery Menu.



```
mpa-ova-2.2.124 c1f97291-ESXi5.1
fsck from util-linux 2.20.1
/dev/sda1: clean, 142019/4325376 files, 1382616/17301248 blocks
Generating grub configuration file ...
Warning: Setting GRUB_TIMEOUT to a non-zero value when GRUB_HIDDEN_TIMEOUT is set is no longer supported.
Found linux image: /boot/vmlinuz-4.4.0-101-generic
Found initrd image: /boot/initrd.img-4.4.0-101-generic
Found linux image: /boot/vmlinuz-4.4.0-96-generic
Found initrd image: /boot/initrd.img-4.4.0-96-generic
Found linux image: /boot/vmlinuz-4.4.0-83-generic
Found initrd image: /boot/initrd.img-4.4.0-83-generic
Found memtest86+ image: /boot/memtest86+.elf
Found memtest86+ image: /boot/memtest86+.bin
done

Finished, please press ENTER
```

8. From the Recovery Menu, select **root Drop to root shell prompt** and press Enter.



```
mpa-ova-2.2.124 c1f97291-ESXi5.1

Recovery Menu (filesystem state: read-only)

    resume           Resume normal boot
    clean            Try to make free space
    dpkg            Repair broken packages
    fsck            Check all file systems
    grub            Update grub bootloader
    network         Enable networking
    root            Drop to root shell prompt
    system-summary  System summary

<Ok>
```

- At the prompt, type `passwd mwadmin` and press Enter to change the password for the `mwadmin` user.

The screenshot shows a terminal window titled "mpa-ova-2.2.124 c1f97291-ESX15.1". The main content is a "Recovery Menu (filesystem state: read/write)" with the following options:

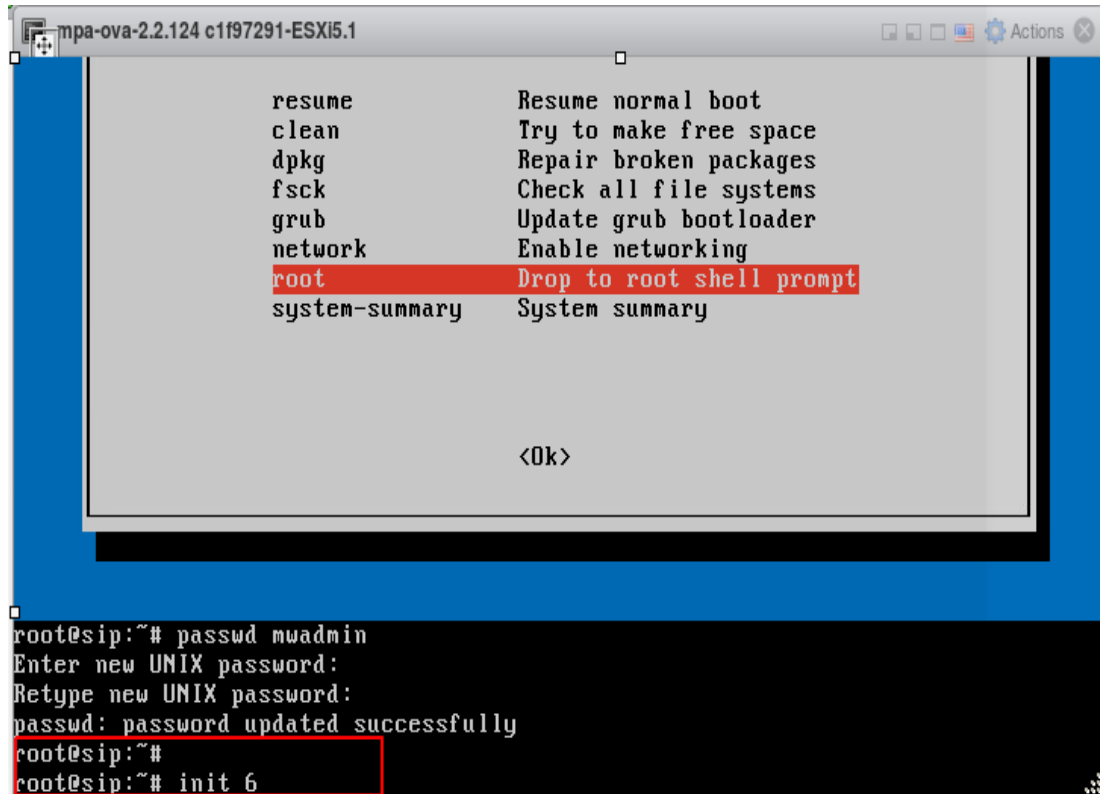
|                |                           |
|----------------|---------------------------|
| resume         | Resume normal boot        |
| clean          | Try to make free space    |
| dpkg           | Repair broken packages    |
| fsck           | Check all file systems    |
| grub           | Update grub bootloader    |
| network        | Enable networking         |
| root           | Drop to root shell prompt |
| system-summary | System summary            |

Below the menu, the terminal shows the command `root@sip:~# passwd mwadmin` being entered and executed. The output is:

```

root@sip:~# passwd mwadmin
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
root@sip:~#
    
```

- Type the new password and press enter, then re-enter it to confirm. The `passwd: password updated successfully` message is displayed in the terminal prompt.
- Type `init 6` at the prompt to reboot the system.



```
mpa-ova-2.2.124 c1f97291-ESXi5.1
resume          Resume normal boot
clean           Try to make free space
dpkg            Repair broken packages
fsck            Check all file systems
grub            Update grub bootloader
network         Enable networking
root            Drop to root shell prompt
system-summary System summary

<Ok>

root@sip:~# passwd mwadmin
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
root@sip:~#
root@sip:~# init 6
```

12. Once the Mitel Performance Analytics server is up and running, you can log in using the new password.

## APPLYING A NEW GPG KEY

GPG (Gnu Privacy Guard) is an encryption method known as public key cryptography. In order to access the encrypted files, a private key is required.

When you upgrade from an earlier version of Mitel Performance Analytics to the current version, the GPG key is automatically applied. If for some reason your GPG key expires, a new key must be manually.

Complete the following step to manually apply a new GPG key:

1. Open a terminal window to the Mitel Performance Analytics server on which you need to update the GPG key.
2. Log in as `mwadmin`.
3. Run the command:

```
sudo apt-key adv --keyserver keyserver.ubuntu.com --recv-keys
891B8FCF
```

**Note:** The key 891B8FCF is specifically for Mitel Performance Analytics version 3.0 or later. Contact [uca-support@martellotech.com](mailto:uca-support@martellotech.com) if you require a GPG key to any other version of Mitel Performance Analytics.



