

# MITEL PERFORMANCE ANALYTICS

RELEASE 2.1

UPGRADE GUIDE



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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 System Guide*.

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

For a complete description of Mitel Performance Analytics, refer to the *Mitel Performance Analytics System Guide*.

## 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.

# 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 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 virtual machine. You should also create a snapshot of your virtual machine. The specific procedures depend on your Hypervisor version. Refer to your VMware documentation for the specific steps to follow.

If you are upgrading a MarWatch 5.1 or Mitel Performance Analytics 2.0 system, you need the `mw-backup.sh` script. It is included with the latest Mitel Performance Analytics 2.1 release software. Prior to beginning the upgrade procedures in this document, contact [support@martellotech.com](mailto:support@martellotech.com) for instructions to install the `mw-backup.sh` script in your existing MarWatch 5.1 or Mitel Performance Analytics 2.0 system. Mitel recommends that you install the `mw-backup.sh` script in the `/home/mwadmin/scripts/` directory.

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

## UPGRADE PROCEDURE – MARWATCH OR MITEL PERFORMANCE ANALYTICS 2.0

This section explains how to upgrade an on-premise MarWatch or Mitel Performance Analytics 2.0 system to the latest available Mitel Performance Analytics 2.1 release. The following is an overview of the process:

1. Backup your data using the `mw-backup.sh` script and store it on another machine or network location. See "Backing up your Data" on page 6 for detailed instructions.
2. Install and test the latest Mitel Performance Analytics 2.1 server. See the *Mitel Performance Analytics 2.1 Installation and Maintenance Guide* for detailed instructions.
3. Copy the backup file to the machine hosting the new Mitel Performance Analytics 2.1. server.
4. Use the `mw-restore.sh` script to restore data. See "Restoring your Data" on page 6 for detailed instructions.

### MarWatch Scheduler Considerations

An upgrade from MarWatch 5.1 to Mitel Performance Analytics 2.1 does not propagate any scheduled SMDR collection settings. Once the upgrade is complete, you need to manually define new schedules on Mitel Performance Analytics 2.1 equivalent to the schedules that existed on MarWatch 5.1. After the upgrade, you must access historical SMDR collection files through the Mitel Performance Analytics 2.1 server file system.

Further, backup schedules are propagated but on a per device basis. Customers may want to take advantage of the new scheduler capabilities that apply at the container level. After the upgrade, customers may want to replace multiple backup schedules each for a single device with a single schedule for multiple devices at the container level.

### Mitel Performance Analytics 2.0 Scheduler Considerations

An upgrade from Mitel Performance Analytics 2.0 to Mitel Performance Analytics 2.1 does not propagate any scheduled backup or SMDR collection settings. Once the upgrade is complete, you need to manually define new schedules on Mitel Performance Analytics 2.1 equivalent to the schedules that existed on Mitel Performance Analytics 2.0. After the upgrade, you must access historical backup or SMDR collection files through the Mitel Performance Analytics 2.1 server file system.

### Mitel Performance Analytics 2.0 Query Views Considerations

An upgrade from Mitel Performance Analytics 2.0 to Mitel Performance Analytics 2.1 does not propagate any query view settings. Once the upgrade is complete, you need to manually create query views on Mitel Performance Analytics 2.1 and save them.

### Scheduled and Queued Reports Considerations

An upgrade from either Mitel Performance Analytics 2.0 or MarWatch 5.1 to Mitel Performance Analytics 2.1 propagates all scheduled and queued Container Reports. Container Reports produce a PDF file. All other scheduled and queued reports produce a CSV file and are not propagated. Once the upgrade is complete, you need to manually define new scheduled reports on Mitel Performance Analytics 2.1 equivalent to those that existed previously.

## BACKING UP YOUR DATA

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. Ensure the backup script is executable. If the backup script was installed in the recommended directory, use the following command:  

```
chmod 755 /home/mwadmin/scripts/mw-backup.sh
```
4. Ensure you are in the `mwadmin` home directory:  

```
cd ~
```
5. Run the `mw-backup` script using `sudo`. By default the backup file is saved in the `mwadmin` home directory.  

```
sudo ./scripts/mw-backup.sh
```
6. When prompted for the `sudo` password, supply the `mwadmin` password.
7. After the script ends, copy the resulting backup file to another machine or network location.

## INSTALLING AND TESTING THE LATEST MITEL PERFORMANCE ANALYTICS 2.1 SERVER

Do the installation steps in the *Mitel Performance Analytics 2.1 Installation and Maintenance Guide*.

## RESTORING YOUR DATA

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 `mw-restore` script using `sudo`:

```
sudo ./scripts/mw-restore.sh <backup-file.tar.gz>
```

Example:

```
sudo ./scripts/mw-restore.sh mpaserver-backup-1474127212.tar.gz
```

5. Steps 5-9 apply only if your system monitors MiVoice MX-ONE devices:

- If your system does not monitor MiVoice MX-ONE devices, perform the steps in "Post-Upgrade Steps" on page 10.
- If your system monitors MiVoice MX-ONE devices, run the following command to stop `tomcat`:

```
sudo /etc/init.d/tomcat stop
```

6. Run the `fixMxOneRrds` script using `sudo`:

```
sudo /usr/share/marwatch/fixMxOneRrds.sh
```

The `fixMxOneRrds` script updates RRD files for MiVoice MX-ONE devices. RRD files are created automatically by Mitel Performance Analytics as needed. The default location for the files is `/var/lib/marwatch/rrd`.

The script may respond with the following error message:

```
There are no relevant RRD files in /var/lib/marwatch/rrd. Please re-run script and provide the base RRD directory as the only argument.
```

If you see this error message and you have configured a different location for the RRD files, rerun the script with the following syntax to specify the location of the RRD files:

```
sudo /usr/share/marwatch/fixMxOneRrds.sh <new RRD directory>
```

If you see this error and you are using the default location for RRD files, proceed to Step 7.

7. Run the following command:

```
sudo chown -R tomcat:tomcat /var/lib/marwatch/rrd
```

8. Run the following command to start `tomcat`:

```
sudo /etc/init.d/tomcat start
```

9. Run the following command to verify that `tomcat` has successfully started:

```
sudo tail -f /var/log/marwatch/catalina.err
```

The following string indicates successful startup:

```
INFO: Server startup in <number>ms
```

10. Perform the steps in "Post-Upgrade Steps" on page 10

## UPGRADE PROCEDURE – MITEL PERFORMANCE ANALYTICS 2.1

This section explains how to upgrade an on-premise Mitel Performance Analytics 2.1 system to the latest available Mitel Performance Analytics 2.1 release.

The upgrade procedure varies depending on whether your Mitel Performance Analytics system has an Internet connection or not.

# MITEL PERFORMANCE ANALYTICS 2.1 – INTERNET CONNECTION

### Updating Mitel Performance Analytics 2.1 Only

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:  
`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 applies the available updates.
6. Steps 6-10 apply only if your system monitors MiVoice MX-ONE devices:
  - If your system does not monitor MiVoice MX-ONE devices, perform the steps in "Post-Upgrade Steps" on page 10.
  - If your system monitors MiVoice MX-ONE devices, run the following command to stop tomcat:  
`sudo /etc/init.d/tomcat stop`

7. Run the `fixMxOneRrds` script using `sudo`:  
`sudo /usr/share/marwatch/fixMxOneRrds.sh`

The `fixMxOneRrds` script updates RRD files for MiVoice MX-ONE devices. RRD files are created automatically by Mitel Performance Analytics as needed. The default location for the files is `/var/lib/marwatch/rrd`.

The script may respond with the following error message:

```
There are no relevant RRD files in /var/lib/marwatch/rrd. Please re-run script and provide the base RRD directory as the only argument.
```

If you see this error message and you have configured a different location for the RRD files, rerun the script with the following syntax to specify the location of the RRD files:

```
sudo /usr/share/marwatch/fixMxOneRrds.sh <new RRD directory>
```

If you see this error and you are using the default location for RRD files, proceed to Step 8.

8. Run the following command:  
`sudo chown -R tomcat:tomcat /var/lib/marwatch/rrd`
9. Run the following command to start tomcat:  
`sudo /etc/init.d/tomcat start`
10. Run the following command to verify that tomcat has successfully started:  
`sudo tail -f /var/log/marwatch/catalina.err`  
The following string indicates successful startup:  
`INFO: Server startup in <number>ms`
11. Perform the steps in "Post-Upgrade Steps" on page 10



### Updating Linux and Mitel Performance Analytics 2.1

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. Run the following command:  

```
sudo apt-get upgrade
```
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.  
Mitel recommends that you restart your VM if the applied updates include an updates Linux kernel.
6. Steps 6-10 apply only if your system monitors MiVoice MX-ONE devices:
  - If your system does not monitor MiVoice MX-ONE devices, perform the steps in "Post-Upgrade Steps" on page 10.
  - If your system monitors MiVoice MX-ONE devices, run the following command to stop `tomcat`:  

```
sudo /etc/init.d/tomcat stop
```
7. Run the `fixMxOneRrds` script using `sudo`:  

```
sudo /usr/share/marwatch/fixMxOneRrds.sh
```

The `fixMxOneRrds` script updates RRD files for MiVoice MX-ONE devices. RRD files are created automatically by Mitel Performance Analytics as needed. The default location for the files is `/var/lib/marwatch/rrd`.

The script may respond with the following error message:

```
There are no relevant RRD files in /var/lib/marwatch/rrd. Please re-run script and provide the base RRD directory as the only argument.
```

If you see this error message and you have configured a different location for the RRD files, rerun the script with the following syntax to specify the location of the RRD files:

```
sudo /usr/share/marwatch/fixMxOneRrds.sh <new RRD directory>
```

If you see this error and you are using the default location for RRD files, proceed to Step 8.
8. Run the following command:  

```
sudo chown -R tomcat:tomcat /var/lib/marwatch/rrd
```
9. Run the following command to start `tomcat`:  

```
sudo /etc/init.d/tomcat start
```
10. Run the following command to verify that `tomcat` has successfully started:  

```
sudo tail -f /var/log/marwatch/catalina.err
```

The following string indicates successful startup:

```
INFO: Server startup in <number>ms
```
11. Perform the steps in "Post-Upgrade Steps" on page 10

# MITEL PERFORMANCE ANALYTICS 2.1 – NO INTERNET CONNECTION

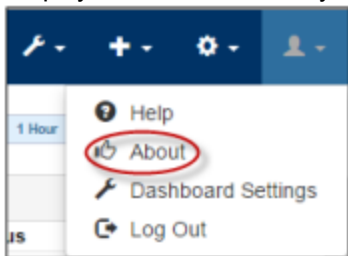
Do the same steps as if upgrading a Mitel Performance Analytics 2.0 system, except your scheduled backup or SMDR collection settings are maintained. You do not need to manually define new schedules on Mitel Performance Analytics 2.1 after the upgrade is complete.

See "Upgrade Procedure – MarWatch or Mitel Performance Analytics 2.0" on page 5.

## POST-UPGRADE STEPS

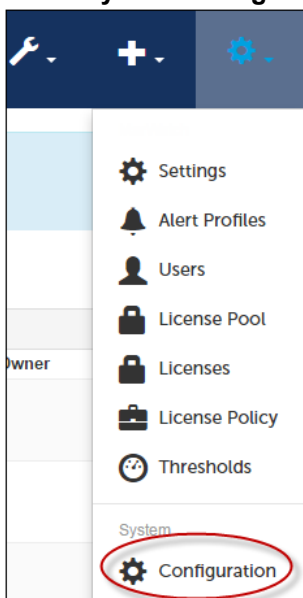
After completing the upgrade, verify Mitel Performance Analytics connectivity by doing the following steps:

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.

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 **System Configuration** under the **Settings** icon.



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.
8. If you upgraded a MarWatch 5.1 server:
  - Define new SMDR collection schedules equivalent to the ones that existed in MarWatch 5.1 previously. Optionally, replace any propagated per device backup schedules with equivalent new container level schedules.
  - Define new report schedules equivalent to the ones that existed in MarWatch 5.1 previously.

Refer to the *Mitel Performance Analytics System Guide* for details.

9. If you upgraded a Mitel Performance Analytics 2.0 server:
  - Define new backup and SMDR collection schedules equivalent to the activities that existed in Mitel Performance Analytics 2.0.
  - Define new report schedules equivalent to the ones that existed in Mitel Performance Analytics 2.0.
  - Define new query views equivalent to the ones that existed in Mitel Performance Analytics 2.0.

Refer to the *Mitel Performance Analytics System Guide* for details.

## ROLL-BACK PROCEDURE

Use the 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.

To roll back to a previous Mitel Performance Analytics version, restore the virtual machine image that you created in "Before you Begin" on page 5.

## PROBE UPGRADE

Probes are automatically upgraded once the Mitel Performance Analytics system is upgraded. Updated files are downloaded to Probe instances as required. No intervention is required to upgrade Probes.

