Redhat and CentOS OS - Security Patch Update

08/2019

AMT/PTD/NMA/0062/5/1/EN

Notice

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Networks™ Corporation (MITEL®).

The information is subject to change without notice and should not be construed in any way as a commitment by Mitel or any of its affiliates or subsidiaries.

Mitel and its affiliates and subsidiaries assume no responsibility for any errors or omissions in this document. Revisions of this document or new editions of it may be issued to incorporate such changes.

No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Mitel Networks Corporation.

CONTENTS

1.1 INTRODUCTION

This document describes how to update the security patches for Redhat Enterprise or CentOS 7.x in MiVoice 5000 Server (minimum R6.3) and MiVoice 5000 Manager (minimum R3.3).

Case of redundant systems

In the case of a redundant system, the update is to be performed on the master and slave machines (MiVoice 5000 Server or MiVoice 5000 Manager) with the recommendations listed in paragraph 1.4:

- In case of an MiVoice 5000 Manager, it is mandatory to begin the update with the security patches on the master machine (active).

- In case of Voice 5000 Server, it is recommended to start the update with the security patches on the slave machine (inactive) in order to minimize downtime.

1.2 PROCEDURE FOR REDHAT ENTERPRISE

1.2.1 PREREQUISITES

- An R6.3 / 3.3 PC minimum (running with RedHat 7.x with 2 ≤ x).
- At least 2 GB must be available on the "/" partition.

For RedHat, the server must be registered with Red Hat Subscription Manager (RHSM). If this is not the case, first register the PC BEFORE using the "Security Patches" package, using “subscription-manager” command. This command allows the subscription to “base channel” for update. You also need to subscribe to “optional channel” for update, using “subscription-manager” command.

In order to get updates for all packages in a redundant environment, the subscription to RedHat must include the “**HighAvailability**” add-on.

The machine must have an Internet access.

1.2.2 PROCEDURE

⚠ **ATTENTION: Previously make a backup of the configuration.**

The duration of the procedure will vary according to the number of patches and the internet connection. Note: you will need at least 30 minutes.

- Log on as "**root**".
- For RedHat, if the PC is not already registered with RHN, register it with RHN via the "**rhn_register**" command.
- Mount the ISO image provided for PCs with internet access:

securityPatch7.x.yy.iso

(where **7.x** means OS in version 7.x and **yy** is replaced by patches DVD edition).

- In a "**Terminal**" window, go to the ISO image mounting root then run the command **./installClientWeb.sh**
- Unmount the ISO image.
- Reboot the PC.

1.3 PROCEDURE FOR CENTOS

1.3.1 PREREQUISITES

- An R6.3 / 3.3 PC minimum (running with CentOS 7.x with 2 ≤ x).
- At least 2 GB must be available on the "/" partition.

1.3.2 PC WITH INTERNET ACCESS

⚠ **ATTENTION: Previously make a backup of the configuration.**

The duration of the procedure will vary according to the number of patches and the internet connection. Note: you will need at least 30 minutes.

- Log on as "**root**".
- Mount the ISO image provided for PCs with internet access:

securityPatch7.x.yy.iso

(where **7.x** means OS in version 7.x and **yy** is replaced by patches DVD edition).

- In a "**Terminal**" window, go to the ISO image mounting root directory then run the command **./installClientWeb.sh.**
- Unmount the ISO image.
- Reboot the PC.

1.3.3 PC WITHOUT INTERNET ACCESS

Note : This section applies only CentOS.

ATTENTION: Previously make a backup of the configuration.

- Log on as "**root**".
- Mount the ISO image provided for PCs without internet access:

securityPatch7.x.yy_Private.iso

(where **7.x** means OS in version 7.x and **yy** is replaced by patches DVD edition).

- In a "**Terminal**" window, go to the ISO image mounting root directory then run the command **./installClientPrivate.sh**.
- Unmount the ISO image.
- Reboot the PC.

1.4 REDUNDANT SYSTEMS

ATTENTION: The procedure is different between the MiVoice 5000 Manager and MiVoice 5000 Server applications.

1.4.1 REDUNDANT MIVOICE 5000 MANAGER

In case of a redundant MiVoice 5000 Manager, it is mandatory to begin the update with the security patches on the master machine (active).

Step by step :

On the Active machine > Master:

- Check state of duplication on Active Machine (master) (**cat /proc/drbd**).
- Check: **cat/proc/drbd** (Primary/secondary) on the active Machine (master).
- Install the patches on the active machine (master). Refer to the paragraphs 1.2 and 1.3.
- Check the installation log files of the patches (under **/tmp**). Refer to the paragraph 1.5.
- Reboot the active machine (master).
- In the case of a virtual machine, check that the VMWARE TOOLS are active, otherwise reinstall the VMWARE TOOLS and reboot the active machine (**master**).
- Switch to the master machine if necessary.
- Check the functioning.
- Switch to the **slave** machine that becomes active.

On the Active machine > Slave:

- Install the patches on the active machine (**slave**). Refer to the paragraphs 1.2 and 1.3.
- Check the installation log files of the patches (under **/tmp**) on the active machine (slave). Refer to the paragraph 1.5.
- Reboot the active machine (**slave**).
- In the case of a virtual machine, check that the VMWARE TOOLS are active, otherwise reinstall the VMWARE TOOLS and reboot the active machine (**slave**).
- Switch back to the **slave** machine that becomes active.
- Check the functioning.
- Switch back to the **master** machine that becomes active.

1.4.2 REDUNDANT MIVOICE 5000 SERVER

In case of a redundant MiVoice 5000 Server, it is recommended to start the update on the slave machine (inactive) in order to minimize downtime.

Step by Step:

- Check state of duplication on the active Machine (**master**) (**cat /proc/drbd**).

On the Inactive machine > Slave:

- Install the patches on the inactive machine (**slave**). Refer to the paragraphs 1.2 and 1.3.
- Check: **cat/proc/drbd** (secondary/primary) on the inactive Machine (**slave**).
- Check the installation log files of the patches (under **/tmp**) on the inactive Machine (**slave**). Refer to the paragraph 1.5.
- Reboot the inactive machine (**slave**).
- In the case of a virtual machine, check that the VMWARE TOOLS are active, otherwise reinstall the VMWARE TOOLS and reboot the inactive machine (**slave**).
- Check: **cat/proc/drbd** (Primary/secondary) on the active Machine (**master**).
- Switch to the **slave** machine that becomes active.
- Check the functioning.

On the Inactive machine > Master:

- Install the patches on the inactive machine (**master**). Refer to the paragraphs 1.2 and 1.3.
- Check the installation log files of the patches (under **/tmp**) on the inactive Machine (**master**). Refer to the paragraph 1.5.
- Reboot the inactive machine (**master**).
- In the case of a virtual machine, check that the VMWARE TOOLS are active, otherwise reinstall the VMWARE TOOLS and reboot the inactive machine (**master**).
- Switch back to the **master** machine that becomes active.
- Check the functioning.

1.5 VIEWING THE TRACE FILE

Two types of trace files are generated as a result update patches:

- A file under /**root** /, indicating the date, the result of the installaion and DRBD upgrading in case of a redundant systems.
- A full trace file available under /tmp /.**This file must be considered (or sent to Mitel) only when the summary file contains the word "Failure".**

1.5.1 SIMPLIFIED FILE

The simplified file, named **Mitel_OS.log**, is generated in the /**root**/ directory.

It is completed at each upgrading to specify:

- The date and the result of installing the patches ("Success" / "Failure") specifying the edition of these patches.
- In the case of a redundant system, the date and the result of DRBD-KM upgrading ("Success" / "Failure").

Examples of contents of this file:

For an update on RedHat/CentOS Web on redundant system:

2012-11-19-19:46 SecurityPatch7.x.0x Success

2012-11-19-19:46 drbd-km-3.10.0.el6-8.4.7-1.x86_64.rpm Success

For update under CentOS without access to the Web on redundant system:

2012-11-19-19:37 SecurityPatch7.x.0x_Private Success

2012-11-19-19:37 drbd-km-3.10.0.el6-8.4.7-1.x86_64.rpm Success

1.5.2 COMPLETE FILE

In all cases, a log file (display of successive screens) is generated in **/tmp/:**

If the PC has an internet access (with DNS):

- **installClientWeb_YYYY-MM-DD.log.**

If the PC does not have any internet access:

- **installClientPrivate_YYYY-MM-DD.log.**

With YYYY-MM-DD which corresponds to the execution date (year, month, day) of the command.

For information, here is the list of messages added to the Log file in case of success or failure of the update:

Success:

- *Installing from the internet only*: "General package patch download successfully completed".
- "General package patch update successfully completed".
- Redundant machine only (with DRBD): "drbd-km package update successfully completed".

Failed:

- Installing from the internet only: "General package download failed".
- "General package update failed".
- Redundant machine only (with DRBD): "drbd-km package update failed".

Note : Success or failure messages can be searched by keywords successfully or failed.

1.6 PROBLEMS OF BOOT ON SOME MACHINES

On some machines, for example DELL R210 servers, the new « kernel » given by the security patches cannot manage to start.

To solve that problem, you need to edit the file /boot/grub/menu.lst and add at the end of the line corresponding to the new kernel the parameter « reboot=pci ».

Here is an example blow for Red Hat:

```
default=0

timeout=5

splashimage=(hd0,0)/grub/splash.xpm.gz

hiddenmenu

title Red Hat Enterprise Linux Server (2.6.32-358.18.1.el6.x86_64)

        root (hd0,0)

        kernel /vmlinuz-2.6.32-358.18.1.el6.x86_64 ro root=UUID=d3b6e1ca-b488-4ac8-a354-17640561c278 rd_NO_LUKS rd_NO_MD quiet LANG=fr_FR.UTF-8 SYSFONT=latarcyrheb-sun16 rhgb KEYBOARDTYPE=pc KEYTABLE=fr-latin9 rd_NO_LVM crashkernel=auto rhgb quiet rd_NO_DM reboot=pci

        initrd /initramfs-2.6.32-358.18.1.el6.x86_64.img
```

Mitel
Powering connections

mitel.com