A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000 Assistant V10R1

Integrated Phone Software Management

Administrator Documentation
07/2024

Mitel

Notices

The information contained in this document is believed to be accurate in all respects but is not warranted by Mitel Europe Limited. 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.

Trademarks

The trademarks, service marks, logos, and graphics (collectively "Trademarks") appearing on Mitel's Internet sites or in its publications are registered and unregistered trademarks of Mitel Networks Corporation (MNC) or its subsidiaries (collectively "Mitel), Unify Software and Solutions GmbH & Co. KG or its affiliates (collectively "Unify") or others. Use of the Trademarks is prohibited without the express consent from Mitel and/or Unify. Please contact our legal department at iplegal@mitel.com for additional information. For a list of the worldwide Mitel and Unify registered trademarks, please refer to the website: http://www.mitel.com/trademarks.

Contents

1 Overview

The Integrated Phone Software Management (IPSM) application can be used to update the new OpenScape DeskPhone CP device family which is delivered with SIP software only.

If there is no Deployment Service (DLS) available on site, the IPSM application can be used to perform so called **cross software update from SIP to HFA.** After the subscriber is configured on OpenScape 4000 RMX (for example over Configuration Management), the device can be started and connected to the network.

In case of installation of unconfigured device ("fresh" installation), the user is asked to configure its own IP, DLS IP (in this case the Assistant CLAN IP for IPSM connection) and subscriber number. Optionally: DHCP can be used to provide IP and DLS/IPSM IP address.

As soon as the IPSM (DLS) IP is configured or changed, the phone device will contact the Assistant IPSM application to check whether it has the correct loadware type (SIP or HFA) and version depending on the RMX configuration. If not, the appropriate loadware is automatically deployed to the device from the IPSM image store.

In any case, the device must provide its subscriber number to IPSM for correct device identification. The subscriber number will be checked against the RMX configuration.

1.1 Prerequisites

- Configured CPXXX HFA phones in RMX (AMO SBCSU)
- Assistant Configuration Management synchronous (Upload in Assistant done, status SYNCHRONOUS)
- Connectivity:

    – from phone device to Assistant Customer LAN (CLAN): TCP port 18443
    – from Assistant CLAN to phone device: TCP/HTTP port 8085
    – from phone device to Platform Portal IP: TCP/HTTPS 443

2 Configuration

Complete configuration consists of following steps:

- Update Service (IPSM/DLS) IP address
- Switch on IP Phones Software Management
- Connect the CPXXX device into network
- Cross update of the loadware in IPSM GUI

2.1 Update Service (IPSM/DLS) IP address

As a first step, the Assistant CLAN IP has to be configured into the phone device.

You can perform it either:

1) Via **DHCP** (page 8) or
2) **Manually** (after device boot, page 9)

    - Via Web Base Management of the device
    - Directly on the device

2.1.1 Set DHCP for sending IPSM IP to devices

Activate vendor encapsulation option and set it to send IPSM IP address.

The vendor encapsulated options consist of:

- **hexadecimal value** for the option number (for instance, 01),
- **the length of the value** (for instance, 07) and
- **the value itself** (for instance, 53:69:65:6D:65:6E:73)

> **NOTICE:** The *#options* can be written in separate lines.

> **NOTICE:** The last *#option* must be terminated with "**;**".

Example of the configuration (exact parameters depend on used DHCP server):

```
#DLS
option vendor-encapsulated-options                          //activation of OPTION 43
# Tag/Option #1: Vendor "Siemens"                           //always must be in option 43 for devices
#1  7  S  i  e  m  e  n  s
01:07:53:69:65:6D:65:6E:73:
# Tag/Option #3: DLS IP Address (here: sdlp://10.82.25.5:18443)   //IP of IPSM in HEX
#2 23  s  d  l  p  :  /  /  1  0  .  8  2  .  2  5  .  5  :  1  8  4  4  3
03:17:73:64:6c:70:3a:2f:2f:31:30:2e:38:32:2e:32:35:2e:35:3a:31:38:34:34:33;
```

Figure 1: Example of the DHCP configuration

> **NOTICE:** The DHCP service might need to be restarted after the configuration change.

2.1.2 Set IPSM IP manually

1) After the device boot, set the IPSM IP via Assistant Integrated Phone
Software Management. (Figure 7)

Figure 2: Assistant Integrated Phone Software Management

2.2 Switch on IP Phones Software Management

NOTICE: The IP Phones Software Management application is
switched off by default.

1) On the Assistant start page, go to Base Administration --> Application
control.
2) Select the "**IP Phones Software Management**" checkbox and press the
"**Submit**" button (Figure 3).

Figure 3: Application Control

3) The IPSM application will appear in the Software Management folder (Figure 4).

> **NOTICE:** You might need to refresh the Assistant Launchpad to be able to see the IPSM after its enabling in Application Control.
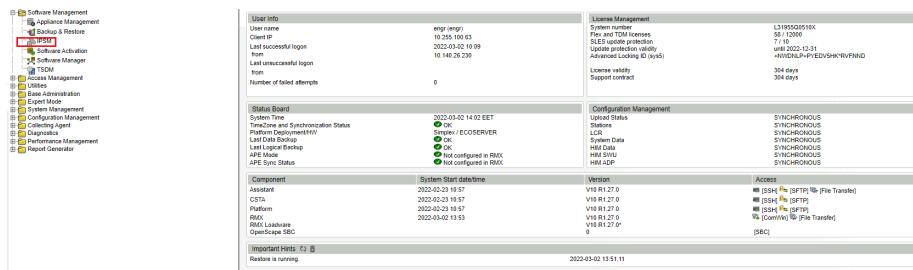
Figure 4: IPSM application in Software Management folder

4) To access the IPSM GUI (Figure 5), click the IPSM icon.

Figure 5: IPSM GUI

2.3 Connect the CPXXX device into network

> **NOTICE:** During the phone startup you may enter the extension number of the configured station (SBCSU) for IPSM recognition and automatic software deployment/configuration. **Do NOT use its E.164 number.**

2.3.1 IPSM IP via DHCP

1) After the device boot, set the **terminal number** when requested by the phone (Figure 6).
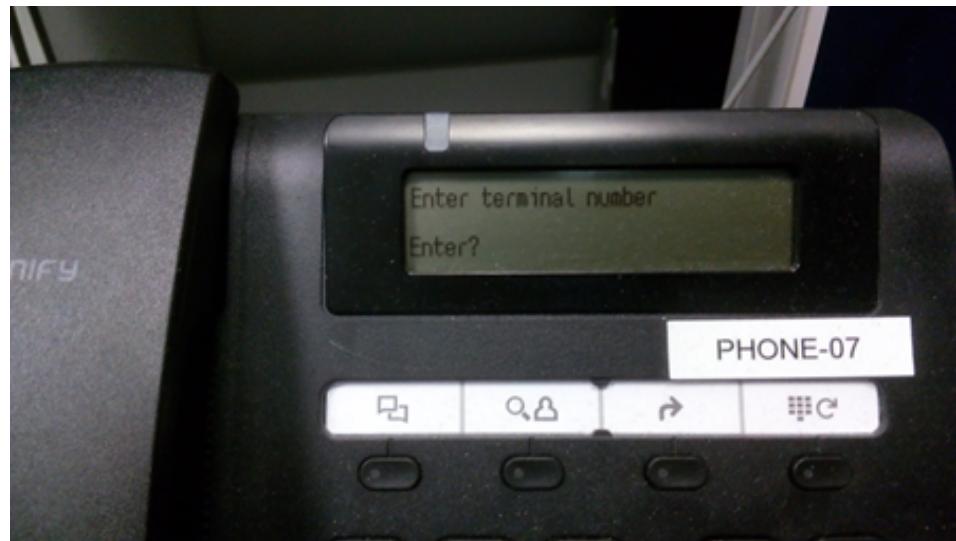
Figure 6: Enter the terminal number on the device

2.3.2 IPSM IP manually

1) After the device boot, set the IPSM IP either via Web Base Management (Figure 7) or directly on the phone.

Figure 7: Web Base Management

**2)** Set the **terminal number** on the device (Figure 8).
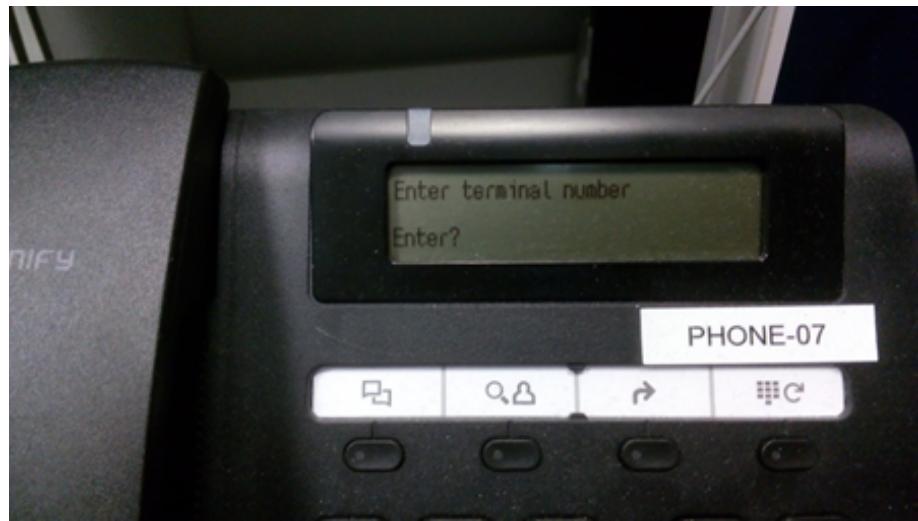
Figure 8: Enter the terminal number on the device

2.4 Cross update of the loadware in IPSM GUI

The cross update of the loadware runs as follows:

Factory configuration SIP --> SIP configuration allowing the cross update --> the highest HFA loadware

1) The cross update of the loadware will start automatically. The progress is displayed in the **"Status"** column of the IPSM GUI (Figure 9).

2) When the process is finished (Figure 10), the device should be able to make a call.

Device Status	Loadware Overview	Preferred Loadware						
0 new loadware updates								
Extension	Device type	Loadware type	Loadware version	IP address	MAC address	Last contacted		Status
+ 15189	OpenScape Desk Phone CP700X	HFA	V1 R6.1.0	10.140.28.189	00:1a:e8:cf:86:02			

Figure 9: Cross update finished

3 Device Status tab

On the Device Status tab (Figure 11), you can:

- See the new changed records since your last visit (marked with the orange rectangle).
- See the overview of all devices which contacted IPSM (marked with the green rectangle).
- See the high level progress of LW deployment (Status column; marked with the purple rectangle).
- Search for a specific device using filters (marked with the blue rectangle).

Figure 10: Device Status tab

3.1 History expansion tab

For each device, the history of main actions, like LW deployment or failed actions, is stored. The history can be displayed by clicking on the plus sign at the beginning of each row (Figure 12).

The history of the individual devices is mapped by their MAC address because the rest of the configuration parameters can be changed. Information is obtained from Logging Management and ten newest records will be shown at maximum.

Figure 11: History expansion tab

3.2 Automatic loadware update

By default, the IPSM executes only the cross-update (HFA to SIP/ SIP to HFA update, see Chapter 2, "Cross update of the loadware in IPSM GUI"). With the Automatic loadware update option, an update within the same variants (HFA to HFA or SIP to SIP) can be also performed. This update will be executed during the start-up of the phone device.

IPSM will update the device LW version to the preferred LW version. You can choose which version you prefer in the Preferred Loadware tab.

The Automatic loadware update feature is disabled by default. To enable it:

1) Click on the **Settings** icon (Figure 13).

Figure 12: Settings icon

2) Select the **Automatic loadware update** checkbox and confirm your choice by clicking on the **OK** button (Figure 14).
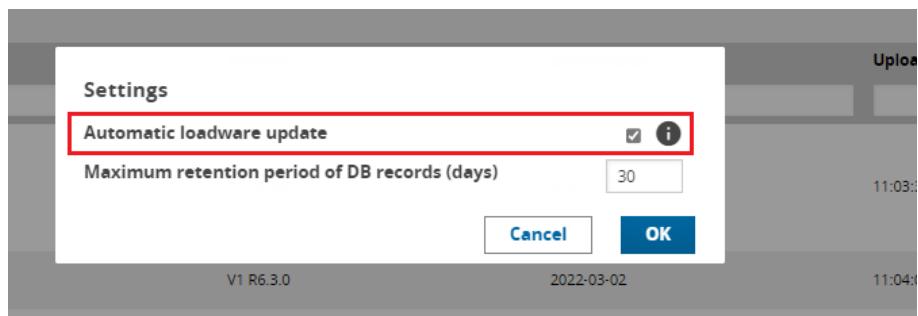

Figure 13: Automatic loadware update checkbox

When this feature is activated, all devices will be updated with the highest (or preferred) loadware version. This will cause the reboot of these devices!

3.3 IPSM Data Houskeeping

Due to maintaining the optimal used space requirements, the IPSM checks once per day the age of each record in the IPSM table. The retention period is set to **30 day by default**. Therefore, every record older than that will be removed.

> **NOTICE:** The retention period is configurable via the **Settings** option in IPSM GUI (Figure 15). The minimum value is 10 days.
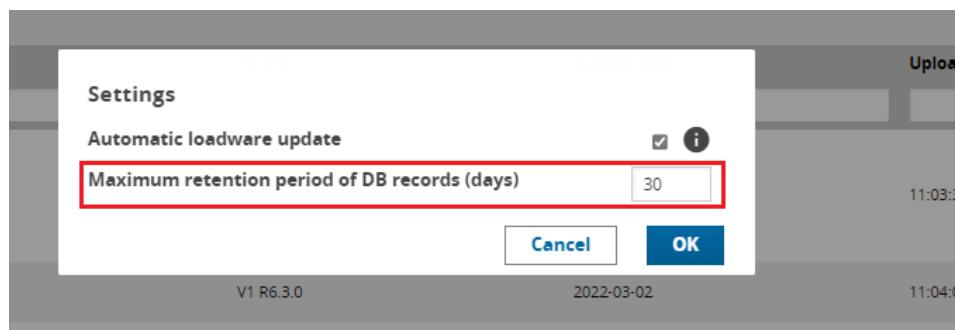
Figure 14: Configuration of retention period

4 Loadware Overview tab

On the Loadware Overview tab (Figure 16), you can:

- Upload or delete loadware for individual devices.
- See the information about loadware (Preferred loadware, Type, Version, Upload date/time).

NOTICE: For the update of a device, the loadware with highest version is preferred.

Filename	Suitable for	Type	Version	Upload date	Upload time	
CP_600_E_HFA_V1_R6_3_0.img	**OpenScape Desk Phone CP400** **OpenScape Desk Phone CP600** **OpenScape Desk Phone CP600E** **OpenScape Desk Phone CP700** **OpenScape Desk Phone CP700X**	HFA	V1 R6.3.0	2022-03-02	11:03:38	Delete
CP20X_HFA_V1_R6_3_0.img	**OpenScape Desk Phone CP200** **OpenScape Desk Phone CP205**	HFA	V1 R6.3.0	2022-03-02	11:04:00	Delete
CP_400_HFA_V1_R6_3_0.img	OpenScape Desk Phone CP400 OpenScape Desk Phone CP600 OpenScape Desk Phone CP600E OpenScape Desk Phone CP700 OpenScape Desk Phone CP700X	HFA	V1 R6.3.0	2022-03-02	11:03:51	Delete
CP_700_X_HFA_V1_R6_3_0.img	OpenScape Desk Phone CP400 OpenScape Desk Phone CP600 OpenScape Desk Phone CP600E OpenScape Desk Phone CP700 OpenScape Desk Phone CP700X	HFA	V1 R6.3.0	2022-03-02	11:03:24	Delete

Figure 15: Loadware Overview tab

Selected elements of the Loadware Overview tab (Figure 17):

- **Upload loadware** button (marked with orange rectangle): allows you to browse to the loadware file and upload it.
- **Pin** Icon (marked with green rectangle): indicates the loadware which is **preferred** for update of the given device.

NOTICE: By default, the preferred loadware for the update of the device is loadware with the **highest version**.

- **Bold highlighted loadware** (marked with purple rectangle): indicates which loadware is preferred for update of the given device.

NOTICE: If there is no Pin icon present, a **default loadware** is used for the given device.

-

Figure 16: Selected elements of the Loadware Overview tab

5 Preferred Loadware tab

On the Preferred Loadware tab, you can (Figure 18):

• See or choose the preferred loadware for different devices and protocols (HFA/SIP).

Preferred Loadware is used for automatic loadware deployment.

NOTICE: By default, the **preferred loadware** for the update of the device is loadware with the **highest version**.


Device Status	Loadware Overview	Preferred Loadware
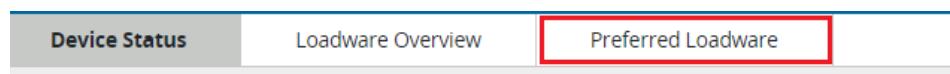
Figure 17: Preferred Loadware tab

If other than the default loadware is chosen, this will be marked on the Loadware tab with a Pin icon (Figure 19).

CP200_HFA_V1_R0_4_0.img   OpenScape Desk Phone CP200 📌   HFA

Figure 18: Preferred loadware marked with Pin

New loadware upload

• When the **default loadware** is set as preferred, the newly uploaded highest version will be used as a preferred loadware for the given device.
• When the user sets as a preferred loadware other than the default one, this loadware will be **marked with Pin** and will **remain as the preferred loadware** for the given device regardless of the upload of the highest version.

Backup and Restore of the system

The settings in Preferred Loadware tab are part of the HBR/CDB backup.

If the backup contains the configuration but the loadware is not present, it is set to default during the system restore.

NOTICE: Loadware files are not a part of the backup.

---

6 Troubleshooting

6.1 Logging

The IPSM actions are recorded in Logging Management. You can get the overview of all IPSM activities using "IPSM" in the Application filter box (Figure 20).


Figure 19: Trace Download: Components

6.2 Tracing

The IPSM traces are integrated in the Trace Download tool (Assistant Start page --> Diagnostics --> Trace Download).

There are two ways how to access the IPSM traces:

1) Profiles tab: select the checkboxes "**Service Applications**" and "**Software Update**" (Figure 21).
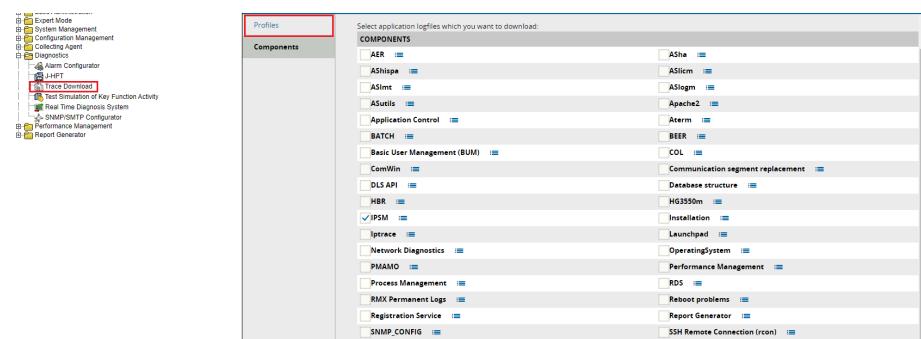
Figure 20: Trace Download: Profiles

2) Components tab: select the checkbox "**IPSM_**" (Figure 22).
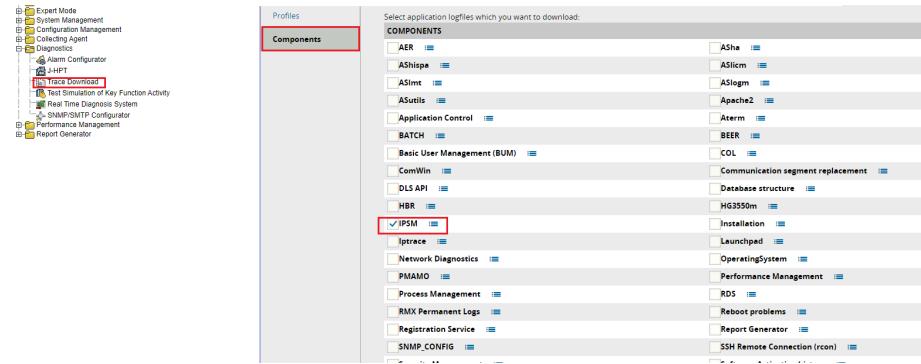
Figure 21: Trace Download: Components

Index

D

Device connection 7

I

IP address update 5
    via DHCP 5

L

Loadware
    upload 12, 14

mitel.com