

# TMA-EP – MiVoice 5300 IP/Digital phone and Mitel 6000 SIP Phone

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AMT/PTD/TR/0027/8/0/EN

INSTALLATION MANUAL



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# 1 ABOUT THIS DOCUMENT

## 1.1 PURPOSE OF THIS DOCUMENT

This

s document describes, for MiVoice 5000, the mechanisms used to manage, via the TMA-EP application integrated into MiVoice 5000 Manager, the terminal range MiVoice 5300 IP Phone, Mitel 6000 SIP Phone and MiVoice 5300 Digital phone in a multi-site environment.

The TMA-EP application must only be used to:

- Manage a heterogeneous multi-site network.
- Gradually update terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone of a multi-site network based on some terminal lists (a list can contain up to 1500 terminals and is associated with a site).
- Update terminals MiVoice 5300 Digital Phone based on sites (no terminal list management).
- Manage several global configuration files associated with the same terminal software package (managing the VLANs of terminals Mitel 6000 SIP Phone via the global configuration file if the LLDP function cannot be used).

## 1.2 AUDIENCE

This document is intended for installers, and provides information on how to:

- Manage a heterogeneous multi-site network.
- Gradually update terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone of a multi-site network based on some terminal lists (a list can contain up to 1500 terminals and is associated with a site).
- Update terminals MiVoice 5300 Digital Phone based on sites (no terminal list management).
- Manage four different terminal MiVoice 5300 Digital Phone software releases with a multi-site (as of R5.2 SP2).
- Manage several global configuration files associated with the same terminal software package (managing the VLANs of terminals Mitel 6000 SIP Phone via the global configuration file if the LLDP function cannot be used).

## 1.3 SCOPE OF THIS DOCUMENT

This manual applies to proprietary IP terminals MiVoice 5300 IP Phone (5360 IP, 5361 IP, 5370 IP, 5380 IP Phone IP), proprietary digital terminals MiVoice 5300 Digital Phone (5361 Digital, 5370 Digital, 5380 Digital) and to Mitel 6000 SIP Phone-series SIP terminals (6730 SIP, 6731 SIP, 6735 SIP, 6737 SIP, 6739 SIP, A6751 SIP, 6753 SIP, 6755 SIP, 6757 SIP, 6863 SIP, 6865 SIP, 6867 SIP, 6869 SIP, 6873 SIP) within the scope of the MiVoice 5000 R63 and MiVoice 5000 Manager V3.5 solutions.

## 1.4 TERMINOLOGY

### 1.4.1 TERMS AND EXPRESSIONS

<b>Mitel 5000 Gateways</b>	This term refers to all XS, XL and XD iPBXs.
<b>MiVoice 5000 or MiVoice 5000 Server XS, XL, XD</b>	Telephony switching system running on a Linux Redhat MiVoice 5000 series physical gateways.
<b>LLDP</b>	Link Layer Discovery Protocol, IEEE 802.1AB. This is a type of frame that allows network devices (station, switch,router, IP phone) to communicate their identity and functions to their environment.
<b>SIP terminal</b>	IP terminal using SIP (Session Initiation Protocol).

### 1.4.2 ABBREVIATIONS

<b>CD-ROM:</b>	<b>C</b> ompact <b>D</b> isk- <b>R</b> ead <b>O</b> nly <b>M</b> emory
<b>DHCP:</b>	<b>D</b> ynamic <b>H</b> ost <b>C</b> onnection <b>P</b> rotocol
<b>FTP:</b>	<b>F</b> ile <b>T</b> ransfer <b>P</b> rotocol
<b>MMI:</b>	<b>M</b> an <b>M</b> achine <b>I</b> nterface
<b>LAN:</b>	<b>L</b> ocal <b>A</b> rea <b>N</b> etwork
<b>LLDP:</b>	<b>L</b> ink <b>L</b> ayer <b>D</b> iscovery <b>P</b> rotocol
<b>NTP:</b>	<b>N</b> etwork <b>T</b> ime <b>P</b> rotocol
<b>OS:</b>	<b>O</b> perating <b>S</b> ystem
<b>PBX:</b>	<b>P</b> rivate <b>B</b> ranch <b>eX</b> change
<b>PC:</b>	<b>P</b> ersonal <b>C</b> omputer
<b>RAM:</b>	<b>R</b> andom <b>A</b> ccess <b>M</b> emory
<b>RAZ (Reset):</b>	<b>R</b> es <b>e</b> t
<b>SIP:</b>	<b>S</b> ession <b>I</b> nitiation <b>P</b> rotocol
<b>TDW</b>	<b>T</b> erminal <b>D</b> ownload <b>S</b> erver
<b>TFTP:</b>	<b>T</b> rivial <b>F</b> ile <b>T</b> ransfer <b>P</b> rotocol
<b>TMA:</b>	<b>T</b> erminal <b>M</b> anagement <b>A</b> pplication
<b>TMA-EP:</b>	<b>TMA</b> <b>E</b> xpert <b>P</b> rovisioning
<b>VLAN:</b>	<b>V</b> irtual <b>L</b> ocal <b>A</b> rea <b>N</b> etwork

## 1.5 REFERENCE DOCUMENTS

### 1.5.1 TERMINAL RELATED DOCUMENTS



**Note:** Documentation is no longer provided with the offer. It is available on the distributor's Extranet – column: Marketing and Sales.



**Note:** The terminal documentation can be consulted on the distributor's extranet, in the column SERVICES / MiVoice 5000 / Knowledge base / Terminals.

PRODUIT	NOM DU DOCUMENT	REFERENCE
5380, 5380 IP	User's guide	AMT/PUD/TR/0015
5370, 5370 IP	User's guide	AMT/PUD/TR/0016
5361, 5361IP	User's guide	AMT/PUD/TR/0106
5360 IP	User's guide	AMT/PUD/TR/0042
6730 SIP/6731 SIP	User's guide	AMT/PUD/TR/0077
6739 SIP	User's guide	AMT/PUD/TR/0078
6753 SIP	User's guide	AMT/PUD/TR/0076
6755 SIP/6735 SIP	User's guide	AMT/PUD/TR/0069
6757 SIP/6737 SIP	User's guide	AMT/PUD/TR/0075
6863 SIP	User's guide	AMT/PUD/TR/0143
6865 SIP	User's guide	AMT/PUD/TR/0144
6867 SIP	User's guide	AMT/PUD/TR/0145
6869 SIP	User's guide	AMT/PUD/TR/0147
6873 SIP	User's guide	AMT/PUD/TR/0148
6920 IP	User's guide	AMT/PUD/TR/0149
6930 IP	User's guide	AMT/PUD/TR/0150
6940 IP	User's guide	AMT/PUD/TR/0151

## 1.5.2 SYSTEM RELATED DOCUMENTS

SYSTEM	DOCUMENT NAME	REFERENCE
MiVoice 5000 Server and Mitel 5000 Gateways	Multi-site management	AMT/PTD/PBX/0081/EN
MiVoice 5000 Server and Mitel 5000 Gateways	Functional description & hardware installation	AMT/PTD/PBX/0150/EN
MiVoice 5000 Server and Mitel 5000 Gateways	Commissioning	AMT/PTD/PBX/0151/FEN
MiVoice 5000 Server and Mitel 5000 Gateways	Operating manual	AMT/PTD/PBX/0080/EN
MiVoice 5000 Server	Installation and Configuration Guide for Redundant MiVoice 5000 Server	AMT/PTD/PBX/0083/EN
MiVoice 5000 Manager	User guide	AMT/PUD/NMA/0003/FEN
Mitel 5000 Gateways, MiVoice 5000 Server and MiVoice 5000 manger	Updating by repository	AMT/PTD/PBX/0155/2/ For R6.5, minimum edition 2

## 2 MANAGING A MULTI-SITE CONFIGURATION WITH THE INTEGRATED TMA-EP HOSTED BY MIVOICE 5000 MANAGER

### 2.1 DESCRIPTION OF TMA-EP

A new TMA management mode is available in MiVoice 5000 Manager V2.2B and later. This new management mode is called **TMA-EP** (**TMA Expert Provisioning**).

By default, TMA is set to **TMA** mode. The management mode is configured in the same way for all the multi-site networks managed by TMA.

Terminals MiVoice 5300 IP Phone, Mitel 6000 SIP Phone and MiVoice 5300 Digital Phone are managed by TMA-EP.

TMA-EP is available on MiVoice 5000 Manager only (it is not available on Mitel 5000 Gateways systems and MiVoice 5000 Server).

This management mode must only be used to:

- Manage a heterogeneous multi-site network.
- Gradually update terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone of a multi-site network based on some terminal lists based on MAC addresses (a list can contain up to 1500 terminals and is associated with a site).
- Update terminals MiVoice 5300 Digital Phone based on sites (no terminal list management).
- Manage four different terminal MiVoice 5300 Digital Phone software releases (as of R5.2 SP1).
- Manage several global configuration files associated with the same terminal software package (managing the VLANs of terminals Mitel 6000 SIP Phone via the global configuration file if the LLDP function cannot be used or if the management of VLAN by DHCP is not available).

For terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone, the list of terminals and the parameters associated with the global and specific configuration files are generated from an Excel form.

The TMA-EP application offers a new configuration MMI for deploying the terminal software package and/or global and/or specific configuration files on the download server(s) and their acceptance by the terminal: the **Provisioning** menu.



**WARNING:** Depending on the site selected in the Provisioning action, the terminal Mitel 6000 SIP Phone or MiVoice 5300 IP Phone restart order will be immediate (site as of R5.2 SP1) or will be sent upon receiving the REGISTER sent by the terminal (R5.1C and R5.2 site).

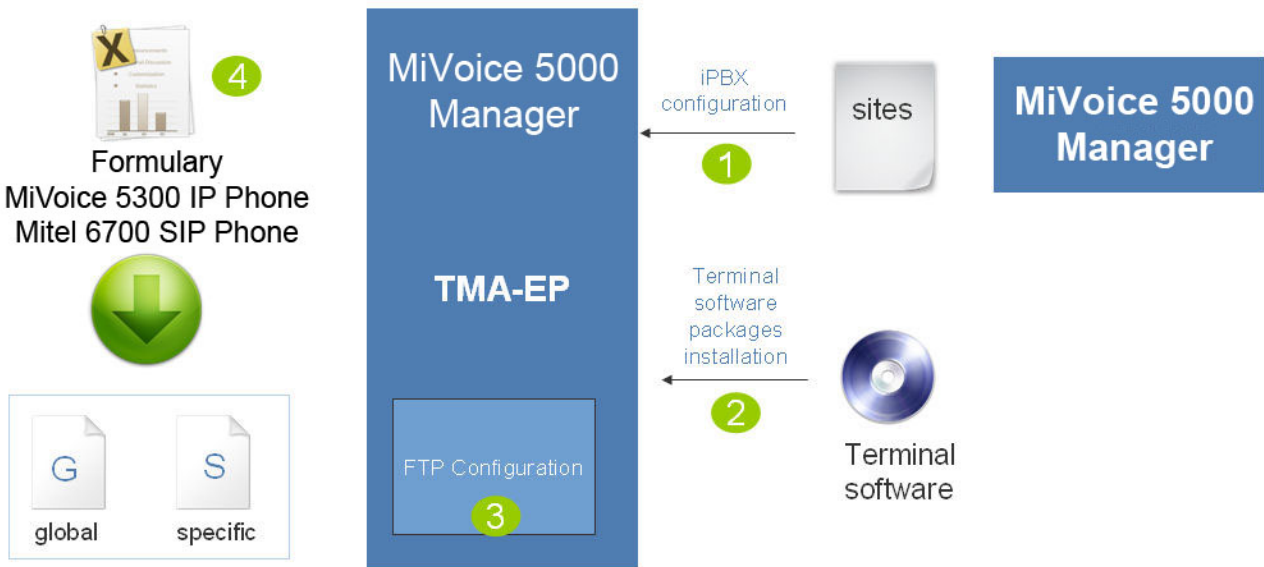


**WARNING:** If no site is selected in the Provisioning action, it is a standard deployment action: the software files, global data files and/or specific data files are sent to the selected download server. No action is sent to the multi-site network site(s), neither is a restart order sent to terminals Mitel 6000 SIP Phone and MiVoice 5300 IP Phone.

## 2.2 USING THE TMA-EP APPLICATION FOR TERMINAL MIVOICE 5300 IP PHONE AND MITEL 6000 SIP PHONE PROVISIONING

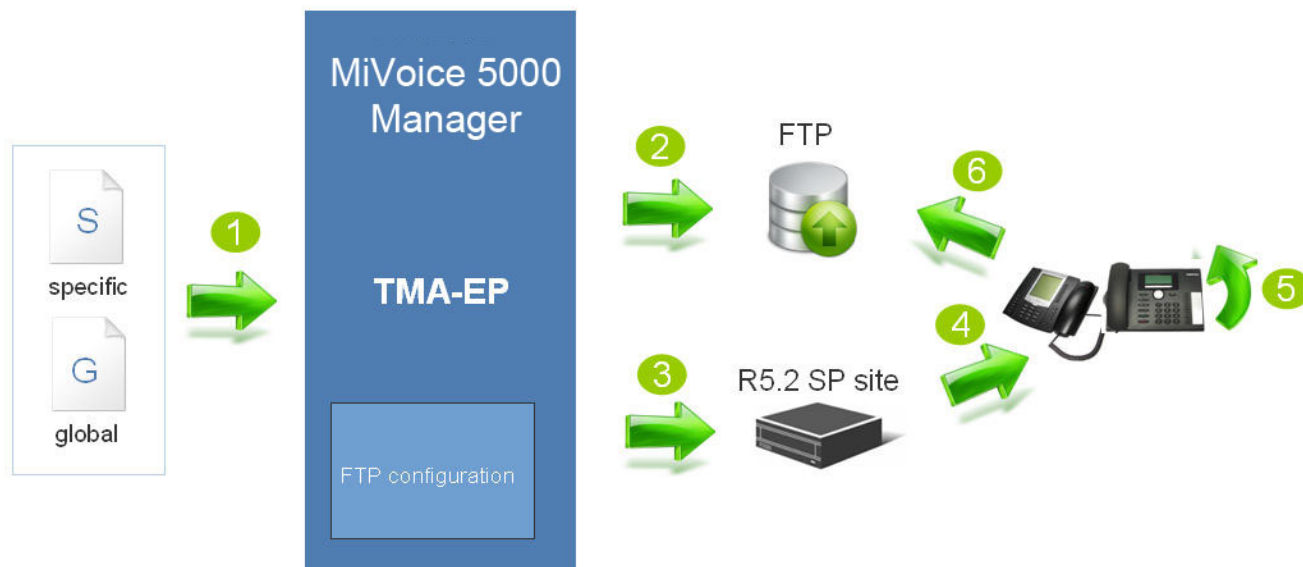
The TMA-EP application is used as follows for terminal MiVoice 5300 IP Phone and Mitel 6000 SIP Phone provisioning:

### 2.2.1 TMA-EP APPLICATION CONFIGURATION



- 1. MiVoice 5000 Manager sends its topology configuration to the TMA-EP application. The iPBX software release is also sent to the TMA-EP application.
- 2. The administrator installs the terminal software package on the TMA-EP application.
- 3. The administrator configures the download server(s) on the TMA-EP application.
- 4. The administrator uses the Excel form to configure the global (optional) and specific (mandatory) parameters of terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone declared on any of the multi-site network sites.

## 2.2.2 DEFINING AND STARTING THE PROVISIONING OF THE TERMINAL SOFTWARE PACKAGE AND/OR GLOBAL AND/OR SPECIFIC CONFIGURATION FILES ON A SITE



The software, global and/or specific data files are sent to the download server selected from all the servers attached to the site. A request is sent to the site so the terminal(s) can be restarted and so it can be updated.



**WARNING:** It is mandatory to import a specific data configuration file containing at least the MAC addresses of the terminals to be updated.

### 1. Defining the provisioning action:

- The administrator selects the region, multi-site and terminal series (MiVoice 5300 IP Phone or Mitel 6000 SIP Phone) as well as the site concerned.
- Then he:
  - Selects one download server from those associated with the site
  - Selects a terminal software package (optional)
  - Imports a global data configuration file (optional)
  - Imports a specific data configuration file (obligatory)
  - Enters the global data index (optional)
  - Enters the specific data index (optional)
  - Imports a template file (Mitel 6000 SIP Phone.cfg) or a certificate (ca.crt) (optional).

### Constraints:

- An download server must be selected.
- The download server configuration must contain the write account login/password and the read login/password for the selected series.
- **It is obligatory to select the specific data configuration file; it must contain at least the list of MAC addresses of the terminals to be updated. If this file contains other parameters, the specific data index must be entered.**
- Selecting a global data configuration file implies entering a global data index and vice versa.

- It is necessary to select a terminal software package or to import a global data configuration file if the specific data configuration file only contains the list of MAC addresses of the terminals to be upgraded.

This action may be immediate or deferred.

**Action management:**

Before executing the action, the TMA-EP application tests the connection with the download server and with the site.

**2.** The TMA-EP application sends the files to the download server (terminal software package, global data configuration file, specific data configuration files, template file, and certificate).

**3,4** The TMA-EP application sends an immediate restart command (with the associated download parameters) to the terminals whose MAC addresses are available in the specific data configuration files.

**5,6** The terminals restart and connect to the download server in order to download all the available files (terminal software package, global data configuration file, specific data configuration files, template file, and certificate).



**WARNING:** Provisioning on a site must be performed in the absence of traffic, because the terminal is restarted immediately even if it is engaged in a call.

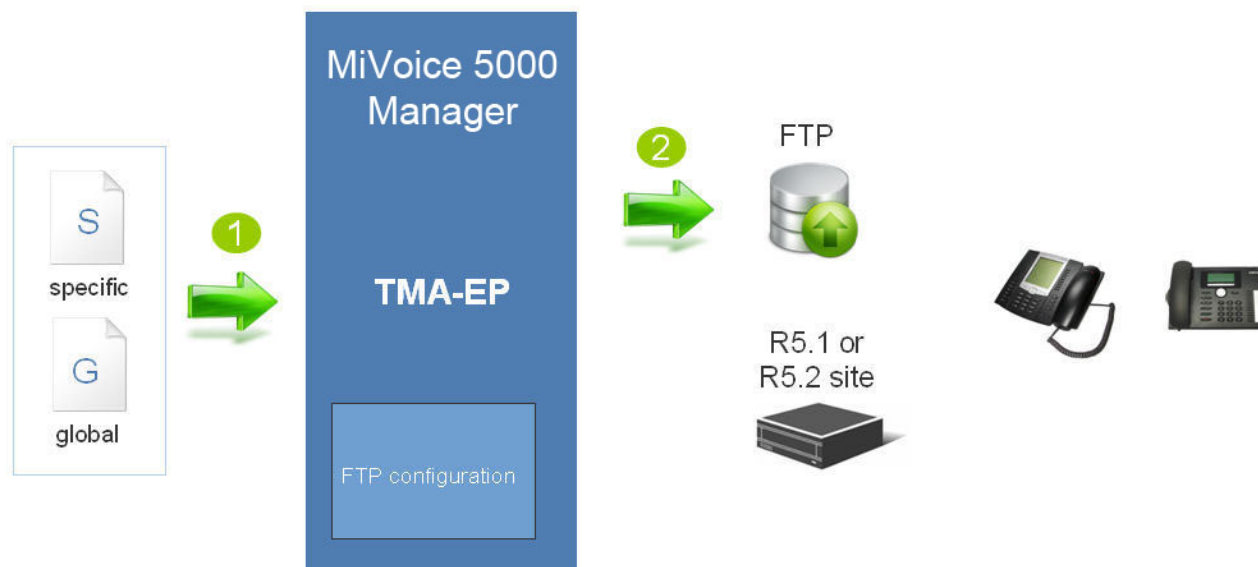


**WARNING:** If a terminal cannot be reached, the operator must define and restart a new action via the TMA-EP application for this terminal. The terminal update can be followed up via the action monitoring menu, from the specific index value.



**WARNING:** The download server must be able to accept the number of simultaneous connections required after immediate restart of all the terminals.

## 2.2.3 DEFINING AND STARTING THE DEPLOYMENT OF THE TERMINAL SOFTWARE PACKAGE AND/OR GLOBAL AND/OR SPECIFIC CONFIGURATION FILES ON THE SELECTED DOWNLOAD SERVER



It is all about a standard deployment: the software files, global data files and/or specific data files are sent to the selected download server. No action is sent to the multi-site configuration site(s).



**Note:** This deployment is identical to the one available in TMA.

### 1. Defining the deployment action:

- The administrator selects the region, multi-site and terminal series (MiVoice 5300 IP Phone or Mitel 6700 SIP Phone) and **does not select any site**.
- Then he:
  - Selects one of the download servers defined for this multi-site configuration (obligatory)
  - Selects a terminal software package (optional)
  - Imports a global data configuration file (optional)
  - Imports a specific data configuration file (optional)
  - Enters the global data index (optional)
  - Enters the specific data index (optional)
  - Imports a template file (6xxxi.cfg) or a certificate (ca.crt) (optional).

### Constraints:

- The download server must be selected.
- The download server configuration must contain the write account login/password and the read login/password for the selected series.
- If a specific data configuration file is selected, it must contain the list of MAC addresses.
- It is necessary to enter at least one terminal software package, the global data configuration file or specific data configuration file.

This action may be immediate or deferred.

**Action management:**

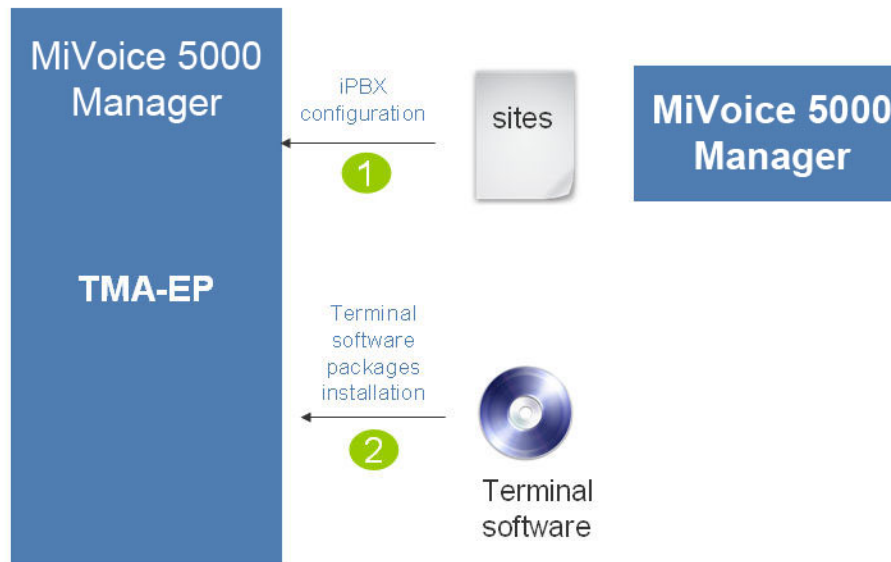
Before executing the action, the TMA-EP application tests the connection with the selected download server.

2. The TMA-EP application then sends the files to the selected download server (terminal software package, global data configuration file, specific data configuration files, template file, and certificate).

## 2.3 USING THE TMA-EP APPLICATION FOR TERMINAL MIVOICE 5300 DIGITAL PHONE PROVISIONING

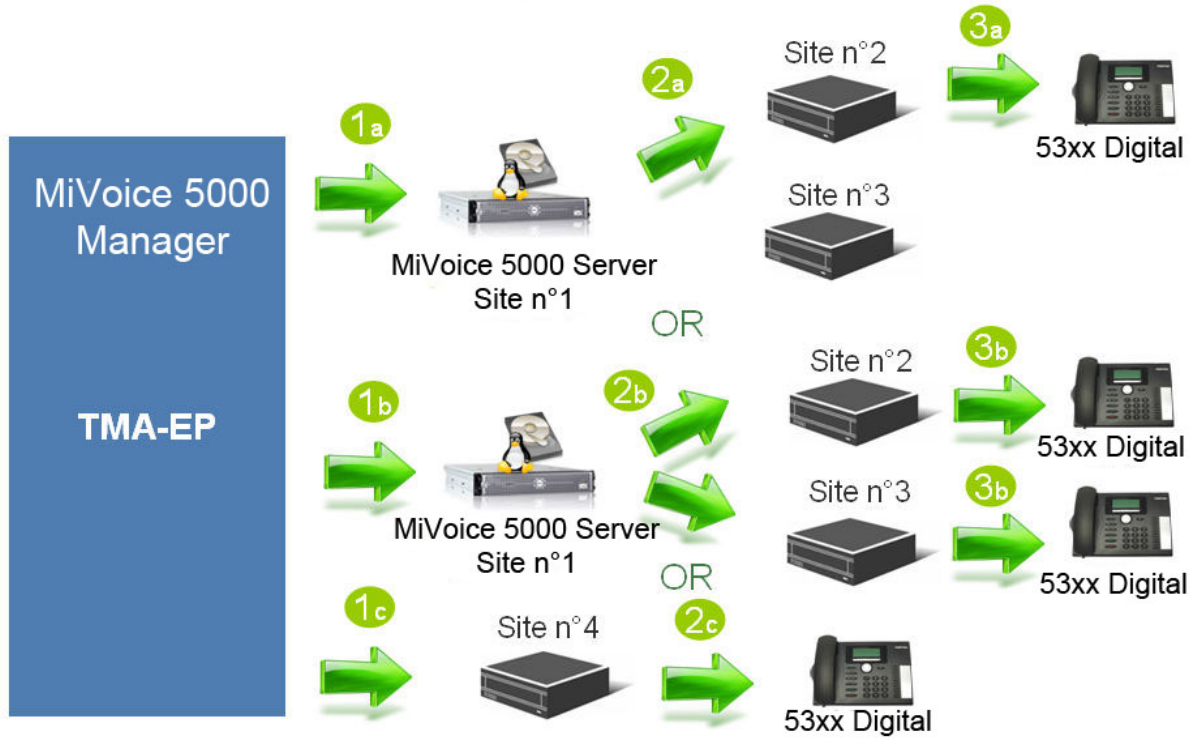
The TMA-EP application is used as follows for terminal MiVoice 5300 Digital Phone provisioning:

### A. TMA-EP application configuration



- 1. MiVoice 5000 Manager sends its topology configuration to the TMA-EP application. The iPBX software release is also sent to the TMA-EP application.
- 2. The administrator installs the terminal software package on the TMA-EP application.

2.3.1 DEFINING AND STARTING THE TERMINAL SOFTWARE PACKAGE PROVISIONING OPERATION ON A SITE



**WARNING:** A site must be selected.

**Defining the provisioning action:**

- The administrator selects the region, multi-site, the MiVoice 5300 Digital Phone terminal series and the site concerned.
- Then he:
  - Selects one of the Mitel 5000 Gateways gateways proposed (optional)
  - Selects a terminal software package (obligatory).

**Constraint:**

- A terminal software package must be selected.

This action may be immediate or deferred.

**If no gateway is selected:**

**1a,2a,3a** The TMA-EP application sends an immediate update action to the terminals MiVoice 5300 Digital Phone whose subscriptions are declared on the site concerned (MiVoice 5000 Server Site No.1) and the devices connected to the gateway (Site No.2)\*. In this case, only a part of the subscriptions declared on site No. 1 is updated.

\* Remote TDM terminal function

**If no gateway is selected:**

**1b,2b,3b** The TMA-EP application sends an immediate update action to the terminals MiVoice 5300 Digital Phone whose subscriptions are declared on the site concerned (MiVoice 5000 Server Site No. 1) and the devices connected to the two gateways (Sites No.2 and 3)\*.

\* Remote TDM terminal function

**If no gateway is selected:**

**1c,2c** The TMA-EP application sends an immediate update action to the terminals MiVoice 5300 Digital Phone whose subscriptions are declared on the site concerned (Site No. 4) and the devices also connected to this site.



**WARNING: The terminal update is followed up via the action monitoring menu.**

## 2.4 ACTIVATING TMA-EP MODE

- Start TMA from the MiVoice 5000 Manager application in a Windows client PC:
  - From the Windows (XP/Vista 7/8) client PC, access the web portal via the url:
  - `https://IP address of the MiVoice 5000 Manager/M7450install` server
  - Click the link **Start MiVoice 5000 Manager client**: the client starts automatically.
  - Enter the login and password assigned by the administrator: the welcome window opens on the MiVoice 5000 Manager welcome screen.
  - Click the **Telephony** menu, then the **Terminals Configuration** menu.
  - For a configuration with several multi-site architectures, a new window opens: select the region, isolated multi-site/site then click **Continue**.
  - Enter the login and password assigned by the administrator: the TMA welcome window opens.
- Select the **Application configuration** menu, then tick the **Expert mode** option.
- Click **Validate** then confirm the TMA-EP mode activation when the warning message is displayed.

A purge mechanism is set up when TMA-EP mode is activated:

- The events log is reset.
- The programmed actions and associated files are deleted.
- The actions log is deleted.

## 2.5 MENUS AVAILABLE IN TMA-EP MODE

The following menus are accessible in the left column:

- **Call Dist**: This menu is used to return to the Web Admin home page.
- **Application configuration**: This menu is used to:
  - Activate the configuration file encryption mode
  - Activate or deactivate TMA-EP mode.
- **Model management**: This menu is used to activate or not the management of the selected model.
- **Servers configuration**: this menu is used to define the download accounts used by TMA-EP and terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone.
- **Inventory**: This menu is used to display the installation terminal inventory (the colours are not managed after the terminal software release is updated).
- **Terminals configuration export**: This menu is used to export in .csv format the global and specific data about terminals Mitel 6000 SIP Phone and MiVoice 5300 IP Phone.
- **Software management**: this menu is used to add or remove some terminal software packages.
- **Provisioning**: This menu is used to massively update a list of terminals. Refer to Chapters 2.2 and 2.3 for information on the provisioning of terminals MiVoice 5300 IP Phone, Mitel 6000 SIP Phone and MiVoice 5300 Digital Phone.
- **Actions display**: this menu is used to follow up completed and programmed actions.
- **Events log**: this menu gives access to the TMA-EP operation log.
- **iPBX configuration**: this menu is used to send a request to an iPBX in order to delete the TDW tables containing information about version and index of data expected for the terminals. This menu must be used after a TMA /TMA-EP operation.

### 3 DEPLOYING A TERMINAL SOFTWARE PACKAGE AND THE GLOBAL CONFIGURATION FILE FOR TERMINALS MITEL 6000 SIP PHONE AND MIVOICE 5300 IP PHONE IN A NEW MULTI-SITE

If no site has been selected in the provisioning operation, it then all about a deployment: the software files, global data files and/or specific data files are sent to the selected download server. No action is sent to the multi-site configuration site(s). This provisioning operation will make it possible to register terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone on the sites using manual login and login site optimisation tools.

#### 3.1 DEPLOYING A TERMINAL SOFTWARE PACKAGE AND THE GLOBAL CONFIGURATION FILE FOR TERMINALS MITEL 6000 SIP PHONE IN A NEW MULTI-SITE

To deploy a terminal software package and the global configuration file for terminals Mitel 6000 SIP Phone in a new multi-site configuration, proceed as follows:

- Prepare the global configuration file via the Excel form **TMA\_provisionning\_67xxi@R6.x\_67xx-i\_xx\_yy.xls**:
  - In the **67xxi Global** tab, in the **PARAMETERS** and **VALUE** columns, enter the parameter values of the global configuration file.
  - Save the **67xxi Global** tab of the Excel form in CSV format with the separator character ;
- Start a provisioning operation to deploy the terminal software R6.x and global configuration file on the download server.
  - Click the **Provisioning** menu.
  - Select the **Region, Multisite** and the **67xxi range**.
  - Do not select any **Site**.



**Note:** Corresponds to the deployment mode

- From the **download server list**, select the download server on which the software files, global and/or specific configuration files must be placed.
- Select the **software release** R6.x installed for this range and this multi-site.
- Click **Browse** to import the previously created **global R6.x (csv) file**.
- Click **Validate**.
- Enter the **Action name**.
- Indicate the **Type of update**: immediate or deferred.
- Click **Validate**.



**WARNING:** See Chapter 2.2.3 for information on the constraints and management of deployment.

- Check in **Action monitoring** and **Events log** that the new terminal software package has been properly deployed.
- If necessary, modify the DHCP server configuration so terminals Mitel 6000 SIP Phone connect to the download server storage area in which the new software package and global configuration file have just been deployed.
- Check that the new terminals deployed after a factory reset connect correctly to this storage area and are automatically updated.
- Registering terminals Mitel 6000 SIP Phone via a deployment login or manual login (free seating)



**Note:** If necessary, prepare via the Excel form `TMA_provisionning_67xxi@R6.x_67xxi_xx_yy.xls` the specific data configuration CSV file and import this specific (csv) file while starting the provisioning operation.

## 3.2 DEPLOYING A TERMINAL SOFTWARE R6.X PACKAGE AND THE GLOBAL CONFIGURATION FILE FOR TERMINALS MIVOICE 5300 IP PHONE IN A NEW MULTI-SITE R6.X ENVIRONMENT

To deploy a terminal software R6.x package and the global configuration file for terminals MiVoice 5300 IP Phone in a new multi-site R6.x configuration, proceed as follows:

- Prepare the global configuration file via the Excel form **TMA\_provisionning\_53xxi@pR6.x\_53xx-ip\_xx\_yy.xls**:
  - In the **Global** tab enter the parameter values of the global configuration file.
  - Save the **Global** tab of the Excel form in CSV format with the separator character ;
- Start a provisioning operation to deploy the terminal software R6.x and global configuration file on the download server.
  - Click the **Provisioning** menu.
  - Select the **Region**, **Multisite** and the **53xxip** range.
  - Do not select any **Site**.



**Note:** Corresponds to the deployment mode

- From the **download server list**, select the download server on which the software files, global and/or specific configuration files must be placed.
- Select the **software release** R6.x installed for this range and this multi-site.
- Click **Browse** to import the previously created **global R6.x (csv) file**.
- Click **Validate**.
- Enter the **Action name**.
- Indicate the **Type of update**: immediate or deferred.
- Click **Validate**.



**WARNING:** See Chapter 2.2.3 for information on the constraints and management of deployment.

- Check in **Action monitoring** and **Events log** that the new terminal software package has been properly deployed.
- If necessary, modify the DHCP server configuration so terminals MiVoice 5300 IP Phone connect to the download server storage area in which the new software package and global configuration file have just been deployed.
- Check that the new terminals deployed after a factory reset connect correctly to this storage area and are automatically updated.
- Register terminals MiVoice 5300 IP Phone via manual login.



**Note:** If necessary, prepare via the Excel form **TMA\_provisionning\_53xxip@R6.x\_53xxip\_xx-yy.xls** the specific data configuration CSV file and import this specific (csv) file while starting the provisioning operation.



## 4 UPDATING GRADUALLY TERMINALS MIVOICE 5300 IP PHONE AND MITEL 6000 SIP PHONE IN A MULTI-SITE CONFIGURATION BASED ON TERMINAL LISTS

For a redundant MiVoice 5000 Server site on which all terminals MiVoice 5300 IP Phone and Mitel 6000 SIP Phone of a multi-site IP network are declared, these terminals can be updated gradually by performing provisioning operations on terminal lists. This gradual update may concern the terminal software release and global and specific data configuration files. It may be necessary to put a function in place (encryption) on a part of the multi-site terminals before generalising it, or to update terminals for selected end-users.

### 4.1 UPDATING GRADUALLY THE SOFTWARE RELEASE OF TERMINALS MIVOICE 5300 IP PHONE IN A MULTI-SITE CONFIGURATION BASED ON TERMINAL LISTS

- Prepare via the Excel form **TMA\_provisionning\_53xxip@R6.x\_53xxip\_xx\_yy.xls** the list of terminals MiVoice 5300 IP Phone to be updated with the terminal software package:
  - In the **Specific** tab enter, in the **MAC\_ADDRESS** column, the MAC addresses of terminals MiVoice 5300 IP Phone in the format 00-08-5d-84-20-61 ou 00085d842061. For the other available specific parameters, enter for each terminal the value **NOTDEFINED**.



**Note:** It is possible to recover the list of terminal MAC addresses through a site-based inventory.



**WARNING:** If you enter the value **NOTDEFINED** in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

- Save the **Specific** tab of the Excel form in CSV format with the separator character ;



**Note:** Define as many specific files as necessary. Each specific file contains at most 1,500 terminals.

- Start a provisioning operation to update terminals MiVoice 5300 IP Phone with the terminal software package via the appropriate external download server area. The list of terminals MiVoice 5300 IP Phone to be updated is created from the MAC addresses available in the specific data configuration csv file.
  - Click the **Provisioning** menu.
  - Select the **Region, Multi-site, 53xxip** range and the site on which terminals MiVoice 5300 IP Phone must be updated.
  - From the proposed **List of download servers**, select the download server associated with the previously selected site.
  - Select one of the terminal software packages proposed in the **Software version** field.
  - Click **Browse**, to import the previously created **specific (csv) file**.
  - If necessary, enter an index value in the **specific index** field (if the specific file contains other parameters in addition to the terminals' MAC addresses).
  - Click **Validate**.
  - Enter the **Action name**.
  - Indicate the **Type of update**: immediate or deferred.

- Click **Validate**.



**WARNING:** See Chapter 2.2.2 for information on the constraints and management of provisioning on a site.

- Check in **Action monitoring** that the provisioning of terminals MiVoice 5300 IP Phone on the R6.x site is working well: the expected software release value must be correct (green) as well as the expected specific index value (if the specific file contains other parameters in addition to the terminals' MAC addresses).



**Note:** Wait for the end of the terminal update then restart a new provisioning operation by importing the new specific R6.x (csv) file containing the new list of terminals to be updated. Perform the same operation for the next lists.



**WARNING:** When the provisioning operation concerns an R6.x site, the update order is immediately sent to all the terminals defined in the specific data configuration csv file: the external download server must, therefore, support a number of simultaneous connections compatible with the number of terminals to be updated.

## 4.2 UPDATING GRADUALLY THE SOFTWARE RELEASE OF TERMINALS MITEL 6000 SIP PHONE IN A MULTI-SITE CONFIGURATION BASED ON TERMINAL LISTS

- Prepare via the Excel form **TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx\_yy.xls** the list of terminals Mitel 6000 SIP Phone to be updated with the terminal software R6.x package:
  - In the **Specific 67xxi** tab enter, in the **MAC\_ADDRESS** column, the MAC addresses of terminals Mitel 6000 SIP Phone in the format 00-08-5D-15-47-FD or 00085D1547FD. For the other available specific parameters, enter for each terminal the value **NOTDEFINED**.



**Note:** It is possible to recover the list of terminal MAC addresses through a site-based inventory.



**WARNING:** If you enter the value **NOTDEFINED** in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

- Save the **67xxi Specific** tab of the Excel form in CSV format with the separator character ;



**Note:** Define as many specific files as necessary. Each specific file contains at most 1,500 terminals.

- Start a provisioning operation to update terminals Mitel 6000 SIP Phone with the terminal software R6.x package via the appropriate external download server area. The list of terminals Mitel 6000 SIP Phone to be updated is created from the MAC addresses available in the specific data configuration csv file.

See Chapter 4.1 for more information about provisioning (select the **6xxxi** range).

## 4.3 UPDATING GRADUALLY THE SPECIFIC PARAMETERS OF TERMINALS MIVOICE 5300 IP PHONE IN A MULTI-SITE CONFIGURATION BASED ON TERMINAL LISTS

- Prepare via the Excel form **TMA\_provisioning\_53xxip@R6.x\_53xxip\_xx\_yy.xls** the list of terminals MiVoice 5300 IP Phone to be updated with the specific parameters concerned:
  - In the **Specific** tab enter, in the **MAC\_ADDRESS** column, the MAC addresses of terminals MiVoice 5300 IP Phone in the format 00-08-5d-84-20-61 ou 00085d842061. For each terminal, enter the new values of the specific parameters to be taken into account.



**Note:** It is possible to recover the list of terminal MAC addresses through a site-based inventory.



**WARNING:** If you enter the value **NOTDEFINED** in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

- Save the Specific tab of the Excel form in CSV format with the separator character ;



**Note:** Define as many specific files as necessary. Each specific file contains at most 1,500 terminals.

- Start a provisioning operation to update terminals MiVoice 5300 IP Phone with the previously modified specific parameters via the appropriate external download server area. The list of terminals MiVoice 5300 IP Phone to be updated is created from the MAC addresses available in the specific data configuration csv file.
  - Click the **Provisioning** menu.
  - Select the **Region, Multi-site, 53xxip** range and the site on which terminals MiVoice 5300 IP Phone must be updated.
  - From the proposed **List of download servers**, select the download server associated with the previously selected site.
  - Click **Browse**, to import the previously created **specific R6.x (csv) file**.
  - Enter an index value in the **specific index** field.
  - Click **Validate**.
  - Enter the **Action name**.
  - Indicate the **Type of update**: immediate or deferred.
  - Click **Validate**.



**WARNING:** See Chapter 2.2.2 for information on the constraints and management of provisioning on an R6.x site.

- Check in **Action monitoring** that the provisioning of terminals MiVoice 5300 IP Phone on the R6.x site is working well: the expected specific index value must be correct (green).



**Note:** Wait for the end of the terminal update then, if necessary, restart a new provisioning operation by importing the new specific (csv) file containing the new list of terminals to be updated as well as the new values of the specific parameters to be taken into account. Perform the same operation for the next lists.



**WARNING:** When the provisioning operation concerns an R6.x site, the update order is immediately sent to all the terminals defined in the specific data configuration csv file: the external download server must, therefore, support a number of simultaneous connections compatible with the number of terminals to be updated.

## 4.4 UPDATING GRADUALLY THE SPECIFIC PARAMETERS OF TERMINALS MITEL 6000 SIP PHONE IN A MULTI-SITE CONFIGURATION BASED ON TERMINAL LISTS

- Prepare via the Excel form **TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx\_yy.xls** the list of terminals Mitel 6000 SIP Phone to be updated with the specific parameters concerned:
  - In the **Specific 6xxi** tab enter, in the **MAC\_ADDRESS** column, the MAC addresses of terminals Mitel 6000 SIP Phone in the format 00-08-5D-15-47-FD or 00085D1547FD. For each terminal, enter the new values of the specific parameters to be taken into account.



**Note:** It is possible to recover the list of terminal MAC addresses through a site-based inventory.



**WARNING:** If you enter the value **NOTDEFINED** in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

- Save the Specific tab of the Excel form in CSV format with the separator character ;



**Note:** Define as many specific files as necessary. Each specific file contains at most 1,500 terminals.

- Start a provisioning operation to update terminals Mitel 6000 SIP Phone with the previously modified specific parameters via the appropriate external download server area. The list of terminals Mitel 6000 SIP Phone to be updated is created from the MAC addresses available in the specific data configuration csv file.

See Chapter 4.3 for more information about provisioning (select the **6xxxi** range).

## 5 MANAGING SEVERAL GLOBAL CONFIGURATION FILES ASSOCIATED WITH THE SAME TERMINAL SOFTWARE PACKAGE

For terminals Mitel 6000 SIP Phone, it may be necessary to manage several global data configuration files. For example, if the VLAN parameter cannot be negotiated via DHCP and the LLDP protocol is not available on the client's network devices as many configuration files as there are (VLAN) subnets will be defined.



**Note:** As of terminal software version 3.3.1 terminals Mitel 6700 SIP Phone, the VLAN can be negotiated by DHCP.

To update several global data configuration files (associated with software release R6.x), proceed as follows:

- Prepare via the Excel form **TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx\_yy.xls** the list of terminals Mitel 6000 SIP Phone to be updated with the parameters contained in the global configuration file:
  - In the **Specific 6xxi** tab enter, in the **MAC\_ADDRESS** column, the MAC addresses of terminals Mitel 6000 SIP Phone in the format 00-08-5D-15-47-FD or 00085D1547FD. For the other available specific parameters, enter for each terminal the value **NOTDEFINED**.



**Note:** It is possible to recover the list of terminal MAC addresses through a site-based inventory.



**Note:** If you enter the value **NOTDEFINED** in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

- Save the Specific tab of the Excel form in CSV format with the separator character ;



**Note:** Define as many specific files as necessary. Each specific file contains at most 1,500 terminals.

- Prepare the global configuration file via the Excel form **TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx\_yy.xls**:
  - In the **67xxi Global** tab, in the **PARAMETERS** and **VALUE** columns, enter the parameter values of the global configuration file, especially the VLAN attached to the terminal.
  - Save the **67xxi Global** tab of the Excel form in CSV format with the separator character ;
- Start a provisioning operation to update terminals Mitel 6000 SIP Phone with the parameters contained in the previously modified global configuration parameters via the appropriate external download server area. The list of terminals Mitel 6000 SIP Phone to be updated is created from the MAC addresses available in the specific data configuration csv file.
  - Click the **Provisioning** menu.
  - Select the **Region, Multi-site, 6xxxi** range and the **R6.x site** on which terminals Mitel 6000 SIP Phone must be updated.
  - From the proposed **List of download servers**, select the R6.x download server associated with the previously selected R6.x site.
  - Click **Browse** to import the previously created **global R6.x (csv) file**.
  - Click **Browse**, to import the previously created **specific R6.x (csv) file**.
  - Enter an index value in the **global index** field.
  - Enter an index value in the **specific index** field.

- Click **Validate**.
- Enter the **Action name**.
- Indicate the **Type of update**: immediate or deferred.
- Click **Validate**.



**WARNING:** See Chapter 2.2.2 for information on the constraints and management of provisioning on an R6.x site.

- Check in **Action monitoring** that the provisioning of terminals Mitel 6000 SIP Phone on the R6.x site is working well: the expected specific index and global index value must be correct (green).



**Note:** Wait for the end of the terminal update then, if necessary, restart a new provisioning operation by importing the new specific R6.x (csv) file containing the new list of terminals to be updated as well as the new global R6.x (csv) file containing the global parameters to be taken into account. Proceed in the same way for each global data configuration file.

## 6 DOWNLOADING FILES INDIVIDUALLY

A new feature is used to download an individual file to the download server(s). This feature is used, in particular, to provide on the download server(s) the template files (model.cfg) used by terminals Mitel 6000 SIP Phone and the certificates (ca.crt) used by terminals Mitel 6000 SIP Phone and MiVoice 5300 IP Phone when encryption is enabled and an external certificate is used.

### 6.1 IMPLEMENTING INDIVIDUAL FILE DOWNLOAD

To download a file individually, proceed as follows:

- Click the **Provisioning** menu.
- Select **Region, Multi-site, range** (6xxxi or 53xxip).
- From those proposed in the **List of download servers**, select the download server(s) to which the template file or certificate must be downloaded.
- In the **Other file** field import, by clicking **Browse**, the template file (6xxxi.cfg) or certificate (ca.crt) to be downloaded.
- Click **Validate**.
- Enter the **Action name**.
- Indicate the **type of update**: immediate or deferred.
- Click **Validate**.
- In **Action monitoring** check that the file is correctly downloaded individually to the download server(s).



**WARNING:** An download server must be selected. Only one file is authorised per provisioning operation. This file is not backed up in the TMA EP directories



**WARNING:**

- This file cannot be a global data file; therefore, the name must be different from **aastra.cfg** (if the 6xxxi range is selected) or **localdb.config.download** (if the 53xxip range is selected).
- If configuration file encryption is activated, the \*.cfg files downloaded individually are encrypted before being sent to the download server because they will not be taken into account..



**Note:** This individual file downloading can be combined with the provisioning functions described in Chapter 2.2.

These files are backed up in the local TMA directory, in the tree structure of the multi-site configuration selected while starting the TMA application, and proposed again for downloading via the files **options previously downloaded** in the **deployment** menu.

After selecting a file previously downloaded individually, the following actions may be taken on these backed up files:

- Viewing (via the View button): a new window opens, displaying the content of the file.
- Deletion (via the Delete button): after confirmation, the file is locally deleted; it will still be available on the download servers on which it may have been deployed.



## 7 TMA-EP IN COMMUNITY MODE

MiVoice 5000 Manager, TMA-EP can be set to community mode. This notion of community in TMA-EP is used to limit an operator's visibility to one (or more) particular communities, according to operator rights.



**WARNING:** TMA-EP configuration in TMA mode is only proposed if the multi-site architecture is managed in MiVoice 5000 Manager in community mode.

- If MiVoice 5000 Manager is restricted to one or more multi-site communities, the operator must select the community with which he wishes to connect in TMA-EP: he is then connected in TMA-EP as regional operator.
  - A regional operator in TMA-EP only has a view of the terminals belonging to this community.
  - A regional operator in TMA-EP cannot change his community in the course of the session.



**Note:** If the MiVoice 5000 Manager operator is limited to a single community, he will directly access TMA-EP as a regional operation without first selecting this community.

- If an MiVoice 5000 Manager operator has access to all the communities of a multi-site architecture, the operator connects to TMA-EP without selecting a community: he is then connected in TMA-EP as national operator.
  - A national operator in TMA-EP has a community-based view of all the terminals on the multi-site architecture.
  - A national operator in TMA-EP can change his community in the course of the session.



**Note:** If the MiVoice 5000 Manager operator has access to all the communities of a multi-site architecture but selects a community, the operator accesses TMA-EP as a regional operation.

## 7.1 CONFIGURING TMA-EP IN COMMUNITY MODE



**WARNING:** TMA-EP configuration in TMA mode is only proposed if the multi-site architecture is managed in MiVoice 5000 Manager in community mode.

- Select the **Administration** menu then the **Network topology** menu.
- Select **Region** then **Multisite/Site**.
- Click **Configuration**.
- In the section **DID number management type**, check that the **Community mode** checkbox is ticked.
- Tick the **TMA in community mode** checkbox then click **Apply**.
- A message indicating that the multi-site modification is successful appears to confirm the configuration of TMA-EP in community mode.

## 7.2 TMA-EP FUNCTIONS AVAILABLE FOR THE REGIONAL OPERATOR IN COMMUNITY MODE



**WARNING:** TMA-EP configuration in community mode deletes the current configuration of TMA-EP download servers. The download servers must be reconfigured on community basis.

The following functions are available in TMA-EP for the regional operator in community mode:

- **Call Dist** menu
- **Server configuration** menu
- **Inventory** menu
- **Terminal configuration export** menu
- **Provisioning** menu
- **Actions monitoring** menu
- **Events Log** menu



**Note:** Only the regional operator has the right to create download servers.

## 7.3 TMA-EP FUNCTIONS AVAILABLE FOR THE NATIONAL OPERATOR IN COMMUNITY MODE



**WARNING:** TMA-EP configuration in community mode deletes the current configuration of TMA-EP download servers. The download servers must be reconfigured on community basis. The national operator cannot create any download server.

The following functions are available in TMA-EP for the national operator in community mode:

- **Call Dist** menu
- **Application configuration** menu
- **Inventory** menu
- **Terminal configuration export** menu
- **Software management** menu
- **Provisioning** menu
- **Actions monitoring** menu
- **Events Log** menu
- **iPBX configuration** menu



**Note:** Only the regional operator has the right to create download servers.

During a provisioning operation, the national operator has a view of all the download servers declared in the multi-site configuration by regional operators.

## 7.4 INVENTORY MENU IN TMA-EP IN COMMUNITY MODE

In the TMA-EP **Inventory** menu, in community mode, the following upgrades appear:

- the **Community** criterion is added as filtering data.
- Only the sites that depend on the selected **Community** are available on the **Site** list.
- A **Community** column is added in the inventory result.

## 7.5 PROVISIONING MENU IN TMA-EP IN COMMUNITY MODE

In the TMA-EP **Provisioning** menu, in community mode, the following upgrades appear:

- **Provisioning** is implemented on **Community** basis and for a list of terminals defined on MAC address basis in a specific csv file.
- A control is implemented on the specific csv file containing the list of terminal MAC addresses in order to check that they belong to the **Community**.
- Terminals not belonging to the **Community** are automatically deleted from the list of MAC addresses imported by the operator.
- The national operator has a view of all the download servers.

## 7.6 MENU USED TO MONITOR TMA-EP OPERATIONS IN COMMUNITY MODE

In the TMA-EP **Action monitoring** menu, in community mode, the following upgrades appear:

- If TMA-EP is opened with a specific **Community** (regional operator), only the actions pertaining to this **Community** are displayed.
- If the action does not concern any site (deployment operation), only the **Community** is displayed.
- The national operator has an overview of the actions taken by all the operators on all the communities.

## 7.7 EVENTS LOG MENU IN TMA-EP IN COMMUNITY MODE

In the TMA-EP **Events log** menu, in community mode, the following upgrades appear:

- If the operator who has programmed the action is limited to a **Community** (regional operator), the **Community** in question appears in brackets beside the operator's name.
- If the operator who has programmed the action has access to all the **Communities** (national operator), the term **national operator** appears in brackets beside the operator's name.
- The national operator has an overview of the events associated with all the operators and concerning all the communities.

## 8 CHANGING FROM TMA-EP MODE TO TMA MODE

If TMA-EP management mode is no longer necessary (heterogeneous multi-site R6.x network upgraded to homogeneous multi-site R6.x network), the following procedure must be followed to change to TMA management mode.

### 8.1 ACTIVATING TMA MODE

- Select the **Application configuration** menu, then untick the **Expert mode** option.
- Click **Validate** then confirm the TMA mode activation when the warning message is displayed.

A purge mechanism is set up when TMA mode is activated:

- The events log is reset.
- The programmed actions and associated files are deleted.
- The actions log is deleted.

### 8.2 ERASING THE DATA PREVIOUSLY HANDLED BY TMA-EP FOR TERMINALS MIVOICE 5300 DIGITAL PHONE AND SAVED ON ALL THE SYSTEMS ON THE MULTI-SITE NETWORK

This procedure is used to erase the data concerning the actions previously taken by the TMA-EP application, recorded on the tables of all the multi-site R6.x systems. These tables contain, in particular, information about the version of the terminals associated with the R6.x sites on which terminals MiVoice 5300 Digital Phone are declared and with the Mitel 5000 Gateways to which terminals MiVoice 5300 Digital Phone are connected.

- In the TMA application, select the **iPBX configuration** menu.
- Select the region and multi-site configuration concerned.
- Select the R6.x site on which the TDW tables are to be reset.
- Tick the **53xx** range on which the reset must be made.
- Click **Reset tables** then confirm the iPBX table configuration reset when the warning message is displayed.
- Check in the events log that this operation is taken into account.



**Note:** Perform this operation on all the R6.x sites in the multi-site configuration.

## 8.3 CONFIGURING R6.X DOWNLOAD SERVERS IN TMA

This procedure is used to modify the download server configuration in order to add the accounts used by TMA and terminals MiVoice 5300 IP Phone and Mitel 6700 SIP Phone in test mode.



**Note:** Concerning the actual configuration of an external download server on Windows 2000/2003 server or MiVoice 5000, refer to the terminal installation manual (AMT/PTD/TR/0014\*).

- In TMA, select the **Server configuration** menu.
- Select the **Region** and **Multisite** concerned.



**Note:** TMA retrieves the configuration of the managed regions, multi-sites and sites from MiVoice 5000 Manager.

- Click the link **Modify server** associated with the R6.x download server.
- Define the following parameters:
  - Test write login /test write password: account used by TMA in test mode to update the download server.
  - Test terminal login / Test terminal password: account used by the terminals in test mode.
- Click **Confirm** to back up the current download server configuration:
  - the window then displays the download server(s) defined for the **Region** and **Multisite** concerned by showing the related site(s).
  - A link allows the current download server configuration to be displayed and/or modified.
  - A link allows the current download server configuration to be deleted.

## 8.4 DEFINING THE PRODUCTION TERMINAL SOFTWARE R6.X PACKAGE

This procedure is used to define the production terminal software package for terminals Mitel 6700 SIP Phone, MiVoice 5300 IP Phone and MiVoice 5300 Digital Phone.

- Click the **Software management** menu.
- Select **Region** and the **Multisite** concerned then the range concerned (**6xxxi** or **53xxip Phone** or **53xx**).



**Note:** TMA retrieves the configuration of the managed regions, multi-sites and sites from MiVoice 5000 Manager.

- Click **Change**.
- Click the link **Configure production software version**.
- Select the terminal software R6.x package then click **Validate**.

## 8.5 PREPARING THE SPECIFIC AND GLOBAL DATA CONFIGURATION FILES IN TMA

The configuration files of the specific data handled previously by TMA-EP are kept while changing to TMA mode. These files are available in the current work directories which are the same for the specific data configuration files, both in TMA and TMA-EP management modes.

The last global data configuration csv file used by TMA-EP must be imported via the TMA **Deployment** menu in order to manage the global data configuration file in the current work directory of TMA.

- In TMA, select the **Deployment** menu.
- Select **Region** and the **Multisite** concerned then the **6xxxi or 53xxip** range.



**Note:** TMA retrieves the configuration of the managed regions, multi-sites and sites from MiVoice 5000 Manager.

- In the **List of download servers** column, click the R6.x download server(s) on which the global data configuration file will be placed.



**Note:** If only one download server is defined, this will be selected by default.

- Select the production version to be deployed.
- Select the **Global (csv) file** to be deployed:
  - Click **Browse** then select the csv file to import and which corresponds to the global data configuration file of terminals Mitel 6000 SIP Phone or MiVoice 5300 IP Phone. Click **Open**.
- Click **Validate** to start global data configuration file deployment: a message indicates that deployment is performed.
- The global data configuration file is then automatically placed by TMA in the storage directory of the previously selected R6.x download server. It is equally copied automatically to the tree on which are stored on the MiVoice 5000 Manager PC, for the multi-site and terminal range concerned, the configuration data used by TMA for these terminals.

## 8.6 DEFINING THE PARAMETERS OF PRODUCTION TERMINAL SOFTWARE R6.X PACKAGE

For a terminal software package, this procedure is used to assign the parameters for each terminal range. The range of each parameter is given.



**Note:** This distribution is necessary if you wish to update the terminal data.

A parameter is defined either:

- In the terminals' global data configuration file (Range = Global)
- In the terminals' specific data configuration file (Range = Specific)
- In the DHCP server (Scope = DHCP)
- Or in none of the previous scopes; so this parameter is not managed (Scope = Ignored).

This distribution must be made for each software release installed.

- Click the **Terminal configuration** menu.
- Select the **Region** and **Multisite** concerned.
- Select the range concerned (**6xxxi or 53xxip**).

- In the field **Version to configure**, select the terminal software package concerned by the distribution.

As of R6.1 SP1, a distribution of the parameters in form of tabs is only displayed for Mitel 6000 SIP Phones:

- **Encryption**: encryption parameters for Mitel 6000 SIP Phones
- **Config**: the usual configuration parameters
- **TimeZone**: date and time, NTP server, time zone configuration parameters
- **Network**: network parameters (DHCP, VLAN, LLDP,..)
- **RFC2833**: RFC2833 / SIP INFO configuration parameters
- **802.1X**: 802.1X configuration parameters
- **RTCP**: RTCP configuration parameters
- **Directory**: configuration parameters used to access the LDAP directory and Exchange contacts (function available as of R6.2)
- **Expert**: all the other parameters not available in the previous tabs.



**Note :** To facilitate the introduction of certain features (encryption, etc.), some parameters are available twice in the tab:

- in the upper part, the parameters have a range and some fixed values.
- in the lower part, the same parameters have a default value which may differ and a range set to ignored.

- Select a tab then define its range for each parameter available in this tab
- For each parameter, define a range similar to the one defined previously in the Excel file during the last provisioning operation with TMA-EP.



**Note:** Pop-ups are used to obtain the definition of each parameter. They appear when the cursor is placed over the name of the parameter.

- Click **Save**:
  - clicking the **Distribute**, button displays the confirmation button.



**Note:** It is possible from MiVoice 5000 Manager V2.3A to unlock the distribution if necessary. In this case, it is mandatory after the new parameter allocation to start some global and specific data update actions so as to take into account the parameter values whose assignment has changed.

- The **Initialise** button restores the factory distribution of the parameters associated with this software release.



**Note:** The parameters managed by DHCP, or ignored, are displayed for information purposes only.

After the distribution operation, it is possible to perform, if necessary, an update of the global and specific data of terminals Mitel 6700 SIP Phone or MiVoice 5300 IP Phone. See the terminal installation manual (AMT/PTD/TR/0014\*) for more information.

## 9 CONFIGURATION FILE FORMAT

The configuration .csv files used by TMA-EP are managed from two Excel forms available in the **sip\_sets\_tma** folder of the MiVoice 5000 R6.x software DVD or CD-ROM:

- TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx.yy.xls
- TMA\_provisionning\_53xxip@R6.x\_53xxip\_xx.yy.xls

### 9.1 GENERATING THE GLOBAL .CSV FILE FOR TERMINALS MITEL 6000 SIP PHONE

The content of the global file for terminals Mitel 6000 SIP Phone can be automatically updated so it is compatible with the new release R6.x, from a global configuration file in a previous release (R5.3 or R5.4) if this latter had been previously exported.

To export the global configuration file of terminals Mitel 6000 SIP Phone before updating the sites to R6.x, see Chapter 3.3.4.

To automatically update the global configuration file of terminals Mitel 6700 SIP Phone to R6.x, see Chapter 3.3.15. Below is an example of a global .csv file for terminals Mitel 6000 SIP Phone.

#	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	# PARAMETERS	VALUE	EXAMPLE	COMMENT										
2	xml get timeout	12	12	Allows you to specify a timeout value, in seconds, that the phone waits for the far side to return a response after accepting the HTTP GET connect										
3	sip proxy ip	20.1.1.2	0.0.0.0	The IP address of the SIP proxy server for which the IP phone uses to send all SIP requests										
4	sip registrar ip	20.1.1.2	0.0.0.0	The address of the registrar for which the IP phone uses to send REGISTER requests.										
5	sip backup proxy ip	0.0.0.0	0.0.0.0	The IP address of the backup SIP proxy server for which the IP phone uses when the primary SIP proxy is unavailable										
6	sip backup registrar ip	0.0.0.0	0.0.0.0	The address of the backup registrar (typically, the backup SIP proxy) for which the IP phone uses to send REGISTER requests if the primary regi										
7	auto resync mode	0	3	Determines whether the configuration server automatically updates the configuration files only, the firmware only, both the firmware and configu										
8	auto resync time	04h00	04h00	hour of the automatic upgrade : The format of the time must be consistency with the set language (language parameter : if french format 00h00 i										
9	image server uri	ftp://picture.picture@20.1.1.2	ftp://login.pa	Allows to specify the server where pictures are stored for display on 39i (supports TFTP, FTP, HTTP and HTTPS)										
10	xml application post list	20.1.1.20	192.168.0.0	The http server that is pushing XML applications to the set										
11	admin password	22222	22222	administrator password. Default value : 22222										
12	backlight mode	1	1	Allows you to turn the backlight on the LCD Off, or Auto (default value Auto) : Off(0) Auto(1)										
13	bl on time	30	30	Allows you to set the amount of time, in seconds, that the backlight stays ON before turning OFF because of inactivity.										
14	inactivity brightness level	0	0	Controls the LCD brightness on 6739i										
15	directory 2	companylist.csv	companylist	public directory name (200 records max)										
16	directory 1	personallist.csv	personallist	privated directory name (200 records max)										
17	sip digit timeout	9	9	Maximum time, in seconds, to press the next digit before sending										
18	sip outbound support	0	0	UNKNOWN PARAMETER INTO SHEET <67xxi All>										
19	web interface enabled	1	1	Web interface enabled 1= yes, 0=no										
20	audio mode	0	0	Allows you to configure how the handsfree key on the IP phone operates : Speaker(0) Headset(1) Speaker/headset(2) Headset/speaker(3)										
21	ring tone	4	4	Level of ring on the incoming call : 0 to 4 (5 = silence)										
22	tone set	France	France	Tones choice by country (Australia, Europe, France, Germany, Italy, Mexico, UK, US)										
23	call waiting tone	1	1	Sending tone for accepting a call in the multiline case on an active communication										
24	call hold reminder during actr	0	0	Enables or disables the ability to initiate a continuous reminder tone in the active call when another call is on hold										
25	call hold reminder	0	0	Enables or disables ring splash timer to start as soon as you put a call on hold										
26	call hold reminder timer	0	0	Specifies a time delay in seconds that a ring splash is heard on a active call when another call was placed on hold										
27	call hold reminder frequency	0	0	Specifies the time interval, in seconds, between each ring splash sound on the active call										
28	input language	French	French	Allows you to specify the language to use for inputs on the IP Phone										
29	language 1	lang_fr.bt	lang_fr.bt	File name for the language 1										
30	language 2	lang_de.bt	lang_de.bt	File name for the language 2										
31	language 3	lang_it.bt	lang_it.bt	File name for the language 3										
32	language 4	lang_es.bt	lang_es.bt	File name for the language 4										
33	language	1	1	The language you want to display in the IP Phone UI and the Aastra Web U 0 (English) 1(French) 2 (Spanish) 3 (German) 4 (Italian)										
34	web language	1	1	language by default on the WEB page (1=French, put in comment to have the english configuration)										
35	date format	9	9	0 (WWWMM DD) 1 (DD-MMM-YY) 2 (YYY-MM-DD) 3 (DD/MM/YYYY) 4 (DD/MM/YY) 5 (DD-MM-YY) 6 (MM/DD/YY) 7 (MMM DD) 8 (DD MM YYYY)										
36	time format	1	1	0 = 12 hour format, 1 = 24 hour format										
37	time server1	20.1.1.4	192.168.65	time server's IP address										
38	time zone code	CET	CET	Assigns a time zone code to the time server										
39	time zone name	FR-Paris	FR-Paris	Assigns a time zone name to the time server										
40	dhcp	1	1	DHCP = 1 : enabled on A5000.										
41	tagging enabled	1	0	Enables or disables VLAN on the IP phones										
42	VLAN id port 1	4095	1	Specifies the VLAN ID used to pass packets through to a PC via Port 1										
43	VLAN id	1023	1	On the IP phone, you configure a VLAN ID that associates with the physical Ethernet Port 0										
44	GoS eth port 1 priority	0	0	Specifies the priority value used for passing VLAN packets through to a PC via Port 1.										
45	priority non-ip	5	5	priority / packet no IP (values between 0 and 7, by default 5)										
46	lldp	0	0	Enables or disables Link Layer Discovery Protocol for Media Endpoint Devices (LLDP-MED) on the IP Phone										
47	sip nat ip	0.0.0.0	0.0.0.0	IP address of the network device that enforces NAT.										
48	sip dial plan	000x*#00(1-6)xxxxxxxx008xxxxxxxx	*-*#(x+#)0	A dial plan describes the number and pattern of digits that a user dials to reach a particular telephone number										
49	emergency dial plan	018(015)017(0112)11x18(1)715	*018(015)01	Emergency number										

## 9.2 GENERATING THE GLOBAL .CSV FILE FOR TERMINALS MIVoice 5300 IP PHONE

The content of the global file for terminals MiVoice 5300 IP Phone can be manually updated so it is compatible with the new release R6.x, from a global configuration file in a previous release (R5.3 or R5.4) if this latter had been previously exported.

To export the global configuration file of terminals MiVoice 5300 IP Phone before updating the sites to R6.x, see Chapter 3.3.4.

To automatically update the global configuration file of terminals MiVoice 5300 IP Phone to R6.x, see Chapter 3.3.16. Below is an example of a global .csv file for terminals MiVoice 5300 IP Phone.

	A	B	C	D	E	F	G	H	I	J	K	L
1	DHCP_ENABLED	DNS_NAME	PBX_ADDRESS	PBX_ADDRESS_BACKUP	SIP_PORT_PBX	SIP_PORT_PBX_BACKUP	SIP_PORT_FTOS_VALUE	SIP_TRANS_PROTO				
2	1		20.1.1.2	20.1.1.3	5060	5060	5060	184	UDP			
3												
4												
5												

## 9.3 GENERATING SPECIFIC .CSV FILES FOR TERMINALS MITEL 6000 SIP PHONE AND MIVoice 5300 IP PHONE

The specific file contains at least the list of MAC addresses of the terminals to be updated and possibly some additional specific data associated with these terminals.

- If no additional specific data is used (while updating the software release or global configuration file of the terminals), just create a .csv file that contains only the MAC addresses of the terminals to be updated: the list of MAC addresses can be recovered by exporting the site-based inventory.

```
MAC_ADDRESS;
00-08-5D-11-DB-FC
00-08-5D-11-A0-A8
00-08-5D-1A-7C-D5
00-08-5D-12-D8-B6
00085D19FAA7
```

- If some specific data are used:
  - With Excel open the file obtained while exporting the specific data, or use the Excel forms TMA\_provisionning\_67xxi@R6.x\_67xxi\_xx\_yy.xls or TMA\_provisionning\_53xxip@R6.x\_53xx-ip\_xx\_yy.xls for a creation.
  - If possible, modify the Excel file then save it in .csv format.



**WARNING:** If you enter the value NOTDEFINED in the Excel form, this parameter will not be taken into account during provisioning and the terminal retains the current value of this parameter.

Example of specific .csv file for terminals MiVoice 5300 IP Phone (setting terminals to encryption mode)

	A	B	C	D	E	F	G	H	I
1	MAC_ADDRESS	SIP_PORT_PBX	SIP_PORT_PBX_BACKUP	SIP_TRANS_PROTO	TRUSTED_CERTS	TIME_SERVER			
2	00-08-5D-84-42-06	5061	5061	TLS		20.1.1.4			
3	00-08-5D-8A-83-C2	5061	5061	TLS		20.1.1.4			
4	00-08-5D-84-21-B4	5061	5061	TLS		20.1.1.4			
5	00-08-5D-84-A2-B3	5061	5061	TLS		20.1.1.4			
6	00-08-5D-84-20-B1	5061	5061	TLS		20.1.1.4			
7	00-08-5D-84-2A-84	5061	5061	TLS		20.1.1.4			
8	00-08-5D-84-19-53	5061	5061	TLS		20.1.1.4			
9	00-08-5D-8A-2D-2A	5061	5061	TLS		20.1.1.4			
10	00-08-5D-8A-83-AB	5061	5061	TLS		20.1.1.4			
11									
12									

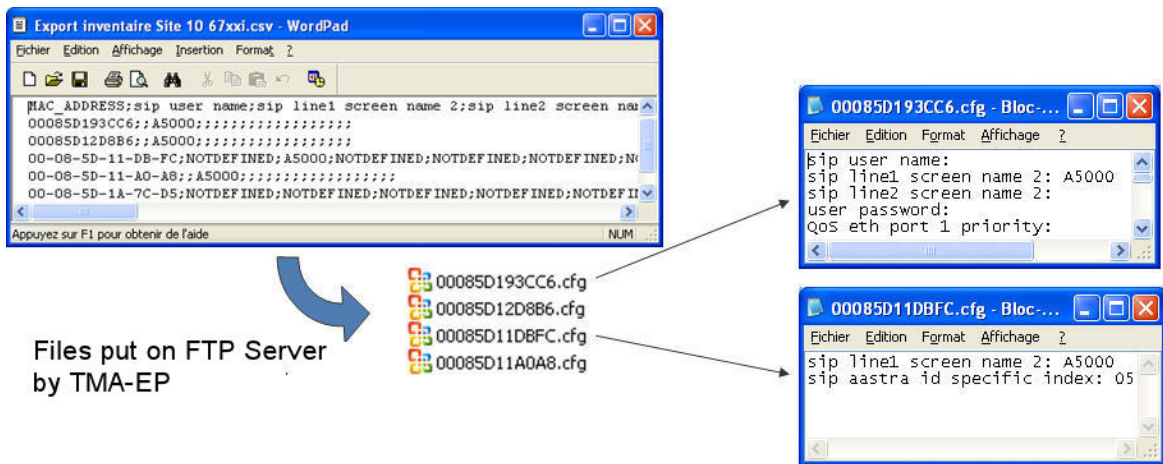
Example of specific .csv file for terminals Mitel 6000 SIP Phone (setting terminals to encryption mode)

	A	B	C	D	E	F	G	H	I	J	K
1	MAC_ADDRESS	sip line1 user name	sip line2 user name	sip proxy port	sip registrar port	sip transport	sips tls authentication	sip srtp mode	sips persistent tls		
2	00-08-5D-19-43-B8	4126		5061	5061	4	0	1	1		
3	00-08-5D-26-6D-F0	4226		5061	5061	4	0	1	1		
4	00-08-5D-13-DD-6D	4262		5061	5061	4	0	1	1		
5	00-08-5D-13-3D-01	4231		5061	5061	4	0	1	1		
6	00-08-5D-29-DA-66	4353		5061	5061	4	0	1	1		
7	00-08-5D-13-DD-77	4376		5061	5061	4	0	1	1		
8	00-08-5D-19-3C-9E	4398		5061	5061	4	0	1	1		
9	00-08-5D-13-DD-5B	4432		5061	5061	4	0	1	1		
10	00-08-5D-13-DD-3B	4688		5061	5061	4	0	1	1		
11	00-08-5D-13-3C-FC	4698		5061	5061	4	0	1	1		
12	00-08-5D-13-DD-71	4715		5061	5061	4	0	1	1		
13	00-08-5D-13-16-31	4862		5061	5061	4	0	1	1		
14	00-08-5D-13-16-15	4863		5061	5061	4	0	1	1		
15	00-08-5D-13-DD-57	4887		5061	5061	4	0	1	1		
16	00-08-5D-10-DE-FB	4963		5061	5061	4	0	1	1		
17											

### 9.4 @MAC FILE GENERATION BY TMA-EP

- When the specific .csv file only contains the MAC\_ADDRESS parameter, no @MAC.cfg or @MAC.ftp file is generated by TMA-EP.
- When the specific .csv file contains only the MAC\_ADDRESS parameter and some other parameters, a @MAC.cfg or @MAC.ftp file is generated by TMA-EP for each MAC address defined in the .csv file. Moreover, depending on the availability of the keyword **NOTDEFINED**, the associated parameter may or may not be available in the @MAC.cfg or @MAC.ftp file generated by TMA-EP.

Below is an example of @MAC.cfg file generation by TMA-EP from a specific .csv file of terminals Mitel 6000 SIP Phone.



Files put on FTP Server by TMA-EP



**WARNING:** The keyword "NOTDEFINED" means that this parameter will not be available in the @mac.cfg file generated by TMA-EP. Thus, this parameter must not be taken into account during the provisioning operation, and the current value of this parameter is retained in the terminal.

