

MiVoice 5000 Server

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AMT/PTD/PBX/0177/0/3/EN
IMPLEMENTATION



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CONTENTS

1	INSTALLING MIVOICE 5000 SERVER (NON- REDUNDANT, WITHOUT DOUBLE ATTACHMENT).....	2
1.1	IMPORTANT PRE-REQUISITE	2
1.2	INSTALLING THE MIVOICE 5000 SERVER APPLICATION ON A NON-VIRTUAL SYSTEM	3
1.3	INSTALLING THE MIVOICE 5000 SERVER APPLICATION IN A VIRTUAL ENVIRONMENT.....	15
1.3.1	DEPLOYING THE VIRTUAL MACHINE.....	15
1.3.2	CONFIGURING THE NETWORK INTERFACES VIA THE USER MENU.....	18
1.4	ACCESSING THE (WEB ADMIN) USER INTERFACE.....	34
1.5	DECLARING THE LICENCES FOR VIRTUAL OR PHYSICAL MIVOICE 5000 SERVER	37
1.5.1	AUTOMATIC MODE.....	37
1.5.2	MANUAL MODE	38
1.5.3	CHECKING THE VIRTUAL DONGLE VALIDITY	39
1.5.4	PRECAUTIONS FOR USE.....	39
1.6	RESETTING THE MANUFACTURER ACCESS CODE.....	40
1.7	IMPORTING DATA INTO THE IPBX FROM THE DATA COLLECTION FORM.....	40
1.7.1	REMINDER.....	40
1.8	ADDITIONAL CONFIGURATIONS.....	40
1.8.1	STARTING AND VIEWING THE SERVICES.....	40
1.8.2	DECLARING AN NTP TIME SERVER	41
2	UPGRADING SIMPLEX OR DUPLEX MIVOICE 5000 SERVER SOFTWARE.....	42
3	APPENDICES	43
3.1	MOUNTING AN ISO IMAGE.....	43
3.2	TAKING THE SECURITY CERTIFICATE INTO ACCOUNT	43
3.2.1	FOR THE MITEL 5000 RANGE.....	43
3.3	MITEL'S LEGAL WARNING CONCERNING WEB ADMIN ACCESS.....	45
3.4	MODIFYING THE DHCP SERVER CONFIGURATION FROM WEB ADMIN	47
3.5	CONFIGURING THE FIREWALL FOR MIVOICE 5000 SERVER	50
3.6	USING THE MASSIVE CREATION FORM	52
3.6.1	CONSIDERATIONS	52
3.6.2	INTRODUCTION	52
3.6.3	STRUCTURE AND CONTENT OF THE EXCEL FORM.....	53
3.6.4	EXTERNAL RECORD CREATION TAB	55
3.6.5	SELECTION KEYS TAB.....	55
3.6.6	MULTI-LINES TAB	55

1 INSTALLING MIVOICE 5000 SERVER (NON-REDUNDANT, WITHOUT DOUBLE ATTACHMENT)

This chapter describes how to install the non-redundant MiVoice 5000 Server application without double attachment. For the redundant MiVoice 5000 server refer to the document MiVoice 5000 Server and Cluster Server - Redundancy.

If the redundant or non redundant system must be configured with double attachment, refer to the document “Rocky Linux and Double attachment”.

Note : Double attachment consists in using two interfaces connected by two separate cables. In this case, we use a virtual "bondx" interface (bonding mode), the only view of the network that allows switching from one physical interface to the other if any of them fails.

1.1 IMPORTANT PRE-REQUISITE

As of R8.0, Rocky Linux must first be installed on the PC (installed in the factory, by default). The specific version is indicated in the release note.

Refer to the document “Rocky Linux and Double Attachment”.

The PC network must have been declared and configured (if necessary, contact the network administrator).

The PC must be connected to the network to which it is dedicated (network cable connected).

In a virtual VMware environment, a zip file is available on the Mitel download server.

This VM contains:

- The operating system, preconfigured to support MiVoice 5000 Server R8.X (partitioning, packaging, etc.).
- To install it, log in and run the command:

su c2ic

1.2 INSTALLING THE MIVOICE 5000 SERVER APPLICATION ON A NON-VIRTUAL SYSTEM

- Log in to the PC as root, with the password Mitel5000.
- Mount the iso image (ACS_A5000_R8.0_RC_AXYY.iso) retrieved from the Mitel website. See in the appendix, Section 3.1.

Once the iso image is mounted:

- Go to the directory containing the installation script:

```
/mnt/iso/inst5000
```

- Run the installation script at the root of the tree:

```
#!/first_install.sh
```

On the next screen, select **F5** and press **Enter**.

The script is then automatically run without the user's intervention.

Pre-configuration starts at the end of the script.

Configuring the IP address of the telephony network

```
MiVoice 5000 Configuration / IP Tel
*-----*
Select the IP you want to enable for the |||
MiVoice 5000 server (Telephony Network side)

| Enter the choice number or another IP address
|| 0 : 20.1.1.1
|| 1 : Another
*-----*

Enter your choice: [] ? 0
```

The screen below opens, asking whether the administration network must be configured in case of administration and telephony flow separation.

```
DO YOU WANT TO CONFIGURE MANAGEMENT IP NETWORK ? Y/[N]
```

If this configuration is not necessary, answer "n" and confirm with the **"Return"** key to go to the next screen concerning country configuration.

If this configuration is necessary in this phase, see the specific document: Implementation Manual for telephony and administration flow separation.

Country configuration (locating menu labels and displaying terminals)

```
MiVoice 5000 Configuration / Country
*-----*
| Enter Country: GB
*-----*
Do you want to change configuration Y(es)/N(o) ? n
```

This screen corresponds to the configuration of the country in which the system will be installed. Choosing the country code makes it possible to define the type of encoding law used by the .wav files deployed by the MEDIA SERVER voice functions as well as the five default spoken languages.

- If necessary, modify the value proposed, otherwise press "**n**" (to keep the proposed value).

```

MIVOICE 5000 CONFIGURATION / Country
*-----*
| ENTER COUNTRY: FRA |
*-----*
| => FRA |
| => ANG           |
| => GER |
| => ... |
| => ... |
| => TWN |
| => BEL |
| => EXP |
*-----*
DO YOU CONFIRM (Y/N)? Y

```

- Enter the country code in case of modification.
- Confirm or reject the modification by pressing "y" or "n".

Configuring the spoken languages

The spoken language configuration menu is used to define the 5 spoken languages used by the following MEDIA SERVER service functions:

- Announcement (ANN)
- Voicemail (IVB)
- Interactive Voice Response (IVR)

```

MiVoice 5000 Configuration / Spoken Language

An existing configuration was found

*-----*

| Enter Language 1 : FRA
| Enter Language 2 : ANG
| Enter Language 3 : GER
| Enter Language 4 : ESP
| Enter Language 5 : POR
*-----*

Do you want to change configuration Y/[N]? Y

```

- If the 5 languages defined by default must be modified, press "**y**".

The 5 spoken languages defined by default can be modified on the screen, among the ones proposed.

```

MIVOICE 5000 CONFIGURATION / SPOKEN LANGUAGE
*-----*
| ENTER LANGUAGE 1 :FRA
| ENTER LANGUAGE 2 :ANG
| ENTER LANGUAGE 3 :GER
| ENTER LANGUAGE 4 :ESP
| ENTER LANGUAGE 5 :POR
*-----*
|          ANG          CTL          DAN
|          ESP          FIN          FLA
|          FRA          GER          HOL
|          ITA          MDT          MEX
|          NOR          POL          POR
|          SUE          TCH          USA
*-----*
DO YOU CONFIRM (Y/N) (PRESS ENTER TO RECONFIGURE) ? Y
    
```

- For each of the 5 spoken languages, in case of modification, enter the language code.
- Press **"Return"** to validate each spoken language.
- Confirm or reject the modifications by pressing **"y"** or **"n"**.

Configuring the licence

```

MiVoice 5000 Configuration / Licence
*-----*
| Licence:                                     |
*-----*
Do you want to change configuration Y(es)/N(o) ? n
    
```

- Enter the corresponding value of the release (optional: it may be entered later from Web Admin).

For a virtual or physical machine, during first installation, if the licence is not known, it is necessary to access Web Admin with Ctrl +i, and to follow the procedure described in Section Erreur ! Source du renvoi introuvable.

- Validate the modifications with the "Return" key, after confirming or rejecting them by pressing **"y"** or **"n"**.

Configuring PARI

```

MIVOICE 5000 CONFIGURATION / PARI
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| | PARI :                123456789 |
| *-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ?

```

- To modify the system's PARI number, type in "**y**" and enter the corresponding value.
- Press "Return" to confirm this modification.
- Confirm or reject this modification by pressing "y" or "n".

Installing the services

This menu is used to install the following services:

- DHCP
- FTP
- TFTP
- SYSLOG
- Announcement
- IVR
- IVB
- CONF

If you wish to manage any of these services, you must install it in advance. Installing the service enables you to modify its status and configuration later via Web Admin.

The FTP service (accounts and storage directories) is automatically configured when the FTP service is started by Web Admin.

The TFTP service is automatically configured when the TFTP service is started by Web Admin. Menu **Telephony service>System> Software maintenance>Tftp**: file loading is only accessible if the TFTP service is installed. This menu is used to place the firmware of terminals A6xxd, 312i and Mitel DECT-IP base stations (RFPs) in the TFTP server storage directory.

The **SYSLOG** service is configured manually and via Menu **Telephony service>System>Expert>Processor access>Debug tool>Traces>Settings**. The IP address configuration is only accessible if the SYSLOG service is installed and if the "step-by-step output" line is validated.

The DHCP service is automatically configured when the DHCP service is started. In a redundant MiVoice 5000 Server configuration, the DHCP service cannot be installed and managed by Web Admin. In this case, it is managed directly by the operating system.

The MEDIA SERVER service comprises the following four functions:

- Announcement: managing announcements and tones (255 announcements and tones maximum)
- IVR: managing the interactive voice response (15 scripts maximum)
- IVB: managing the integrated voicemail boxes (15000 IVBs maximum)
- CONF: managing three-way conferences

ATTENTION : G.711 (A law or μ law), G.729 and G.722 are available and are used by the announcement, IVR, IVB and conference functions of the MEDIA SERVER service.

ATTENTION : G.711 40ms and G.722 40ms are not supported by terminals A53xxip.

```

MIVOICE 5000 CONFIGURATION / MANAGED SERVICE
ACTUAL CONFIGURATION IS:
*-----*
| DHCP (0/1) :           0           |
| FTP (0/1) :           0           |
| TFTP (0/1) :          1           |
| SYSLOG (0/1) :        0           |
| SSH (0/1) :           0           |
| ANNOUNCEMENT (0/1) :  1           |
| IVR (0/1) :           1           |
| IVB (0/1) :           0           |
| CONFERENCE(0/1) :     1           |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y/[N]? Y
    
```

- To install a service, press "y". The next screen is used to modify the value of the DHCP, FTP, TFTP, SYSLOG, SSH, ANNOUNCEMENT, IVR, IVB and CONFERENCE fields. The values entered must be 0 (service not installed) or 1 (service installed).
- If any of the four functions ANNOUNCEMENT or IVR or IVB or CONFERENCE is installed, the MEDIA SERVER service is automatically installed.
- Press "Return" to confirm each modification.
- Then confirm or reject the modifications by pressing "y" or "n".

Configuring service start

The status of the FTP, TMA and DHCP services can be modified so they may or may not be started automatically. If a service is not configured to start automatically, Menu Telephony service>System>Configuration>Web Admin services can be used to start it manually later.

The FTP service is used to download, via TMA, the firmware and configuration files used by MiVoice 5300 IP Phones and Mitel 6000 SIP Phones and the firmware used by Mitel 53xx phones. Refer to the Terminal Installation Manual

The TMA service is used by TMA, and to manage IP and TDM terminals. Refer to the Terminal Installation Manual. The TMA service configuration is accessible via the Web Admin terminal service menu.

The DHCP service allows a lease to be automatically assigned to MiVoice 5300 IP Phones and Mitel 6000 SIP Phones, and negotiates with them the standard and specific parameters required to configure them. Refer to the Terminal Installation Manual

```
MIVOICE 5000 CONFIGURATION / SERVICES TO START AUTOMATICALLY
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| FTP (0/1) :           0 |
| TMA (0/1) :           1 |
| DHCP (0/1) :          0 |
```

- If the answer is YES, "y", the screen below can be used to modify the value of the FTP, TMA and DHCP fields. The values entered may be 0 (automatic service start) or 1 (manual service start via Web Admin).
- Press "Return" to confirm each modification.
- Then confirm or reject the modifications by pressing "y" or "n".

```
MIVOICE 5000 CONFIGURATION / SERVICES TO START AUTOMATICALLY
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| FTP (0/1) :           1 |
| TMA (0/1) :           1 |
| DHCP (0/1) :          1 |
*-----*
```

FTP: value 0 or 1.

This field allows (1 = yes) or disallows (0= no) the use of the integrated FTP server on MiVoice 5000 Server during first installation. The FTP server may only be used (1) when there are 53xxip phones in the installation.

Default value in factory settings: **FTP = 0**

TMA: value 0 or 1.

This field allows the use (1 = yes) or non-use (0= no) of the TMA service integrated into MiVoice 5000 Server. For management by MiVoice 5000 Manager, the integrated TMA service is inactive since management is centralised for all the terminals on MiVoice 5000 Manager.

Default value in factory settings: **TMA = 1**

DHCP: value 0 or 1.

This field allows (1 = yes) or disallows (0= no) the use of the integrated DHCP service on MiVoice 5000 Server.

If an external DHCP server is used, the DHCP service is inactive.

Configuring the deployment of Mitel 6700 SIP Phones

If DHCP is on 0 in the previous service start menu, the parameters TERMINAL VLAN and PC VLAN are proposed in the Mitel 6700 SIP Phone configuration menu.

```
MiVoice 5000 Configuration / SIP Mitel 6700 SIP Phone
An existing configuration was found
*-----*
|
| LLDP ENABLED : 0
| TERMINAL VLAN:
| PC VLAN:
*-----*
Do you want to change configuration Y(es)/N(o) ? N
```

LLDP ENABLED

This field is used to activate the LLDP in Mitel 6700 SIP Phone (1 = yes) or not (0= no).

TERMINAL VLAN and PC VLAN: these parameters are used to define the VLAN dedicated to Mitel 6700 SIP Phones. They are not mandatory on simple networks.

If DHCP is on 1 in the previous service start menu, the settings TERMINAL VLAN and PC VLAN are not proposed in the Mitel 6700 SIP Phone configuration menu.

```
MiVoice 5000 Configuration / SIP Mitel 6700 SIP Phone
An existing configuration was found
*-----*
| LLDP ENABLED : 0
*-----*
Do you confirm (Y/N)?
```

- If necessary, modify the value of the LLDP field.
- Then confirm or reject the modifications by pressing "y" or "n".

DHCP server configuration

If the DHCP service had been previously installed, this menu can be used to automatically pre-configure the DHCP server for Mitel 6700 SIP Phones and for terminals A53xxip and i7xx. For terminals i7xx, it is advisable to configure the DHCP from Web MMCs.

IMPORTANT : This DHCP pre-configuration requires that the deployed network interface be called eth0.

If this is not the case, the DHCP server must be reconfigured from Web Admin, following the procedure described in the section “Modifying the DHCP server configuration from Web Admin”.

```
Mitel 5000 Configuration / DHCP
*-----*
| SUBNET MASK : 255.255.255.0
| BEGIN RANGE : 20.1.1.100
| END RANGE : 20.1.1.199
| GATEWAY : 20.1.1.254
| TERMINAL VLAN:
|
| PC VLAN:
*-----*
Do you confirm (Y/N) (Press enter to reconfigure) ? y
```

SUBNET MASK: subnet mask dedicated to IP and SIP terminals

BEGIN RANGE and END RANGE: address range dedicated to IP and SIP terminals

GATEWAY: IP address of the network gateway dedicated to the IP and SIP terminals

TERMINAL VLAN and PC VLAN: These parameters are used to define the VLAN dedicated to Mitel 6700 SIP Phones and to terminals A53xxip and i7xx. They are not mandatory on simple networks.

- Press "Return" to confirm each input.
- Then confirm or reject the modifications by pressing "y" or "n".

Configuring Name & IID

The system's general parameters declaration screen opens (name IID (system identification number)):

```
MIVOICE 5000 CONFIGURATION / Name&IID
*-----*
| DO YOU WANT TO CONFIGURE NAME/IID (Y/N) : Y |
```

- If you answer YES, "**y**", the next screen allows you to declare the system's general parameters (11 digits).

```
MIVOICE 5000 CONFIGURATION / Name&IID
*-----*
| NAME: MIVOICE 5000 |
| IID: 00130927001 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

- Press "Return" to confirm the modifications.
- Then confirm or reject the modifications by pressing "y" or "n".

Configuring the numbering plan length

```
MIVOICE 5000 CONFIGURATION / NL
*-----*
| DO YOU WANT TO CONFIGURE NUMBERING LENGTH: Y |
*-----*
```

- Press "**Return**" to confirm, after entering "**y**" or "**n**".

If the answer is "y", enter the corresponding values.

The field is used to define the internal number length to take into account (2 to 10).

```
MIVOICE 5000 CONFIGURATION / NL
*-----*
| NUMBERING LENGTH: 4 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

- Press "Return" to confirm the modifications.
- Then confirm or reject this modification by pressing "y" or "n".

Configuring call distribution

```
MIVOICE 5000 CONFIGURATION / Call Dist
*-----*
| DO YOU WANT TO CONFIGURE CALL DISTRIBUTION: Y |
*-----*
```

- Press "Return" to confirm, after entering "y" or "n".

If the answer is "y", enter the corresponding values.

```
MIVOICE 5000 CONFIGURATION / Call Dist
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| SUBSCRIBER: 3005 |
| DID: 4000 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

SUBSCRIBER:

This field allows you to assign a subscription number as a day number reduced to reception 0. This number is assigned if it corresponds to an internal subscription which can be added to a call distribution service, or if it corresponds to the number of a subscription that may be on the multi-site network (MiVoice 5000 Server).

DID:

This field is used to assign a DID number to call distribution service 0. Authorised characters are "0123456789ABCDE".

- Press "Return" to confirm the modifications.
- Then confirm or reject these modifications by pressing "y" or "n".

Configuring subscriptions

```
MIVOICE 5000 CONFIGURATION / Subscribers
*-----*
| DO YOU WANT TO CONFIGURE SUBSCRIBERS (Y/N): Y |
*-----*
```

If the answer is "y", enter the corresponding values for the different fields described below.

```
MIVOICE 5000 CONFIGURATION / Subscribers
*-----*
| CREATION (0/1) : 1 |
| IVB CREATION (0/1) : 1 |
| UNIFIED IVB (0/1): 1 |
| FIRST : 3000 |
| LAST : 3999 |
| DID NUMBERING LENGTH 4 |
| FIRST DID : 3000 |
| FIRST PUBLIC DID : +33(0)130923000 |
| IVB : 3998 |
| COMMON SUBSCRIBER : 3500 |
| ADDITIONNAL SUBSCRIPTIONS : 40 |
| PASSWORD SUBSCRIBERS: 0000 |
| GENERATION OF SETS AUTHENTICATION=1 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

CREATION:

This field may be used to inhibit automatic subscriber creation. This field may take on the values 0 (= creation inhibited) or 1(= creation authorised).

The **numbering length** field defined on the previous screen contains the internal number length to take into account (2 to 6). If this is a valid value, the fields **first, last, common subscriber** will be taken into account. Otherwise, they will be ignored.

IVB CREATION:

This field is used to automatically create the voicemail boxes associated with the automatically created subscriptions. This field is only proposed if the IVB function is installed.

UNIFIED IVB:

The **Unified IVB** field is used to define some unified voice mail boxes, if available.

FIRST:

This field contains the first internal subscription that can be created automatically.

LAST:

This field contains the last internal subscription that can be created automatically.

DID numbering length:

This field is used to define the internal number length in the incoming number plan (i.e. DID numbers).

FIRST DID:

This field is used to create the external block 0 associated with the internal number block [first, last]. Authorised characters are "0123456789ABCDE". For this block to be created, this number must belong to an incoming number plan.

FIRST PUBLIC DID:

The field is used to associate a public number (format: 0130967000 or +33(0)130967000) with the DID number for block 0. This ASCII string will be truncated to 20 characters.

IVB:

This field is used to define the IVB access number. This field is only proposed if the IVB function is installed.

COMMON SUBSCRIBER:

This field is only read and taken into account if it is in the complete block and if this number exists already. If this is not the case, or if the field does not exist, they are assigned a default number. If their value is 0, they will not be assigned any number. The **common subscriber** field must always have a number.

ADDITIONNAL SUBSCRIPTIONS:

This field indicates the number of further internal subscriptions to create.

Password Subscribers:

This field is used to define the default subscriber password.

This same password will be used to access the IVB and to deploy Mitel 6000 SIP Phones.

Generation of sets authentication=1

This field is used to activate/deactivate the generation of a terminal authentication during subscription creation. The default value is 1 = YES => terminal authentication generated during subscription creation. This is the case during a first installation, for instance.

Managing the assignment of numbers to subscriptions:

Create a general-purpose subscription.

If automatic creation is authorised, for each subscriber equipment detected, create a subscription, assign it a DID number (read in the external block), or assign it a voice mail box if creation is authorised. Then update its LDAP directory record with the internal number and possibly DID number. Then assign this subscription to the detected equipment and then go to the next equipment.

After processing all the equipment, if automatic creation is allowed, create as many additional subscriptions as necessary (and as possible). Assign them a DID number (read in the external block) and a voice mail box if automatic creation is authorised, then update their LDAP directory record with the internal number and possibly DID number.

- Press "**y**" and confirm by pressing "**Return**".
- The screen then displays a summary of the configuration made (example).

```

| SUMMARY:
*-----*
| IPADR = 20.1.1.1          |
| NAME = MIVOICE 5000     |
| IID = 00130927001       |
| FIRST : 3000             |
| LAST : 3999             |
| DID NUMBERING LENGTH 4  |
| FIRST DID : 3000        |
| FIRST PUBLIC DID : +33(0)130923000 |
| IVB : 3998              |
| NUMBERING LENGHT = 4   |
| COUNTRY = FRA          |
| LICENCE = 123456789123 |
| PARI =                  |
| START UP TYPE = TOTAL  |
| DEDICATED SNMPD = Y    |
|                          |
*-----*
DO YOU WANT TO APPLY YOUR CHANGE Y(ES)/N(O)/R(ECONFIGURE) ? y

```

If the summary is not correct:

- Press "**r**" to restart the preconfiguration (from the first "Choose country" screen).
- If the summary is correct:

- Press "**y**" if the values displayed are correct and confirm by pressing "**Return**".

Restarting the virtual MiVoice 5000 Server PC

On the MiVoice 5000 Server PC:

- Go to Menu **System > Stop**.
- Click the "**Restart**" button.
- Wait for the end of the start operation.

The configuration phase is complete.

Initial installation has been completed and you can now configure the site (see the document MiVoice 5000 Server - Operating Manual).

1.3 INSTALLING THE MIVOICE 5000 SERVER APPLICATION IN A VIRTUAL ENVIRONMENT

1.3.1 DEPLOYING THE VIRTUAL MACHINE

1.3.1.1 *In a VMWare environment*

From the **ova** image provided by Mitel, proceed as follows:

- Unzip the content of the .zip file to a local disk or network space. This space must be accessible from the vSphere client of the ESX Server on which the MiVoice 5000 Server VM must be installed. This space must be accessible from the vSphere client of the ESX Server on which the MiVoice 5000 Server VM must be installed.
- Connect to the ESX server machine via the client vSphere.
- Select the **.ova** file.
- Then click **Next**.
- Check the details of the deployed model then click **Next**.
- Check and, if necessary, modify the VM name then click **Next**.
- Select the disk format.

Note : The number of cores and size of RAM in the VM can be modified, if necessary, according to the load from Menu **Modify virtual machine parameters, Hardware tab.**

- Choose the network.
- Click **Finish** to start deploying the VM.
- Wait till the end of the deployment then click **Close**.
- Select the VM then start it by clicking the green arrow.
- Click the **Console** tab.
- Log on as root (default password: **Mitel5000**).

ATTENTION : The system input language is English, and the initial keyboard AZERTY. The numeric keypad is not activated.

Depending on the language you want, type in the following commands

- For French:

```
# localectl set-keymap fr
```

- For English:

```
localectl set-keymap us
```

1.3.1.2 *In a KVM environment*

Content of the archive in tgz format

The archive in tgz format contains:

- The disk file (**.qcow2**)
- The systems characteristics XML file (**.xml**)
- The MD5 signature of previous files (**.md5**)

VM content

- 1 vCPU
- 1 GB RAM
- 10 GB disk space

VM deployment

Note : Files must be extracted from the TGZ archive in Linux, on the target machine with KVM packaging.

From the archive in **tgz** format, available on the Mitel download server, follow the procedure below:

Copy the archive to a directory on the KVM server on which the MiVoice 5000 Server VM must be deployed.

Note : The partition to which the archive will be copied must have at least 10 GB space available.

Go to the directory to which the archive files have been copied and extract the archive files using the command "**tar xzf A5000_SAAS-KVM_RY.X_xyz.tgz**".

Copy the disk file (**.qcow2**) to the directory **/var/lib/libvirt/images**

Copy the file (**.xml**) to the **/tmp** work directory.

Type in the **virsh net-list -all** command in order to list the network interfaces declared on this Linux machine for KVM virtualisation.

Edit the systems characteristics XML file (**.xml**) located in **/tmp** and adapt the VM to the characteristics of the machine and, in particular, **saaslan** and **saaswan**.

Install the VM with this command:

```
virsh define /tmp/ MV5000.xml
```

Start the VM with this command:

```
virsh start MV5000
```

Set the VM to automatic start with this command:

```
virsh autostart MV5000
```

Connect to the VM (login: **c2ic** and password: **c2ic**)

virsh console MV5000

login: c2ic

password: c2ic

Note : To exit the virsh console, press **Ctrl+5**. Do not use the numeric keypad.

See Section Configuring the network interfaces via the User menu.

1.3.1.3 *In a HyperV & Azure environment*

- Retrieve the HyperV & Azure compatible ZIP and extract the .vhd disk file.
- Upload the .vhd disk file to the Azure cloud using one of the methods documented by Microsoft Azure:
 - Microsoft Azure Storage Explorer,
 - PowerShell and AzCopy.
- From the Azure portal create the VM using the disk file:
 - Refer to the documentation for CPU/memory capacity.

See Section Configuring the network interfaces via the User menu.

1.3.2 CONFIGURING THE NETWORK INTERFACES VIA THE USER MENU

Run the command:

/opt/a5000/infra/utls/bin/utd/usermenu.sh

The configuration menu opens. Answer the different questions as follows:

CONFIGURATION

YOU CAN ACCESS THE MIVOICE 5000 SERVER FROM HTTPS://

1) REBOOT	6) UPDATEOS-SECURITY	11) IDENTIFICATION
2) NETWORK	7) TOTAL	12) KEYBOARD
3) SET-NTP-SERVER	8) STANDARD	13) LOGOUT
4) PASSWORD	9) BACKUP-SPECIFIC	
5) UPDATEOS-FULL	10) RESTORE-SPECIFIC	

SELECT AN OPTION AND PRESS ENTER: **2** -----> **(PRESS 2)**

NETWORK CONFIGURATION MENU

1) IP-ADDRESS	3) DNS	5) BRIDGE
2) ROUTES	4) HOSTNAME	6) QUIT

NETWORK - SELECT MENU: **1** -----> **(PRESS 1)**

CURRENT CONFIGURATION

LANA=192.168.1.101/24

LANB=

Configuring LANA (and possibly LANB for VPN, SBC services)

CONFIGURE NETWORK

- 1) LANA
- 2) LANB
- 3) QUIT

SELECT INTERFACE: **1** -----> (**PRESS 1 FOR LANA**)

CONFIGURING LANA

IP ADDRESS [Y] ? **10.10.10.10** -----> (ENTER THE IP ADDRESS IN QUESTION)
NETMASK [Y] ? **255.255.255.0** -----> (ENTER THE MASK IN QUESTION)
APPLY Y/N [N] ? **Y**

Press **Return** to confirm.

The script is run.

At the end, the menu below opens (after you have pressed **Return**):

SELECT INTERFACE:

- 1) LANA
- 2) LANB
- 3) QUIT

SELECT INTERFACE: **3** -----> (PRESS 3 TO EXIT)

Note : If the LANB interface must be configured (VPN, SBC), select **2 LANB** to configure it using the same procedure as for LANA. This configuration may be made later.

Configuring the default gateway (LANA)

From the previous screen:

NETWORK CONFIGURATION MENU

NETWORK - SELECT MENU:

- | | | |
|---------------|-------------|-----------|
| 1) IP-ADDRESS | 3) DNS | 5) BRIDGE |
| 2) ROUTES | 4) HOSTNAME | 6) QUIT |

NETWORK - SELECT MENU: **2** ----> (PRESS 2 TO ACCESS THE GATEWAY CONFIGURATION MENU)

ROUTE CONFIGURATION MENU

- | | | |
|--------------|----------|----------|
| 1) SHOW | 3)ADD | 5) APPLY |
| 2) DEFAULTGW | 4)DELETE | 6) QUIT |

ROUTES - SELECT MENU : **2** ----> (PRESS 2 TO ACCESS THE GATEWAY CONFIGURATION MENU)

ENTER DEFAULT GATEWAY : 10.10.10.1

- 1) LANA
- 2) LANB

SELECT INTERFACE: **1** -----> (**PRESS 1 FOR LANA**)

ROUTES SELECT MENU

- | | | |
|--------------|----------|----------|
| 1) SHOW | 3)ADD | 5) APPLY |
| 2) DEFAULTGW | 4)DELETE | 6) QUIT |

ROUTES - SELECT MENU : **5** ----> (PRESS 5 TO CONFIRM)

THE SYSTEM RESTARTS.

RESTARTING NETWORK (VIA SYSTEMCTL) : [OK]

ROUTES SELECT MENU

- | | | |
|--------------|----------|----------|
| 1) SHOW | 3)ADD | 5) APPLY |
| 2) DEFAULTGW | 4)DELETE | 6) QUIT |

ROUTES - SELECT MENU : **6** ---> (PRESS 6 TO EXIT)

NETWORK CONFIGURATION MENU

- 1) IP-ADDRESS 3) DNS 5) BRIDGE
- 2) ROUTES 4) HOSTNAME 6) QUIT

NETWORK - SELECT MENU: **6** -----> (PRESS 6 TO EXIT)

The main menu is displayed again.

Installing MiVoice 5000 Server from the User menu in TOTAL mode

The MiVoice 5000 Server installation script is automatically run without the user's intervention. Pre-configuration starts at the end of the script.

SELECT AN OPTION AND PRESS ENTER:

- 1) REBOOT 6) UPDATEOS-SECURITY 11) IDENTIFICATION
- 2) NETWORK 7) TOTAL 12) KEYBOARD
- 3) SET-NTP-SERVER 8) STANDARD 13) LOGOUT
- 4) PASSWORD 9) BACKUP-SPECIFIC
- 5) UPDATEOS-FULL 10) RESTORE-SPECIFIC

SELECT AN OPTION AND PRESS ENTER: **7** -----> (PRESS 7 TO RESTART IN TOTAL MODE)

Configuring the IP address of the telephony network Choose the IP address previously configured for LAN A

```

MiVoice 5000 Configuration / IP Tel
*-----*
| Select the IP you want to enable for the                               |
| MiVoice 5000 server (Telephony Network side)                         |
|                                                                         |
| Enter the choice number or another IP address                          |
| 0 :10.10.10.10                                                         |
| 1 :10.10.10.10                                                         |
| 2 :10.10.10.10                                                         |
| 3: Another                                                               |
*-----*
Enter your choice: [ ] ? 0
    
```

IMPORTANT : The choice must be **0** - the default LAN address.

The screen below opens, asking whether the administration network must be configured in case of administration and telephony flow separation.

```

DO YOU WANT TO CONFIGURE MANAGEMENT IP NETWORK ? Y/[N]
    
```

If this configuration is not necessary, answer "n" and confirm with the "Return" key to go to the next screen concerning the country configuration.

If this configuration is necessary in this phase, see the specific document: Operating Manual for telephony and administration flow separation.

Country configuration (locating menu labels and displaying sets)

```

MiVoice 5000 Configuration / Country
*-----*
| Enter Country: GB
*-----*
Do you want to change configuration Y(es)/N(o) ? n

```

This screen corresponds to the configuration of the country in which the system will be installed. Choosing the country code makes it possible to define the type of encoding law used by the .wav files deployed by the MEDIA SERVER voice functions as well as the five default spoken languages.

- If necessary, modify the value proposed, otherwise press "**n**" (to keep the proposed value).

```

MIVOICE 5000 CONFIGURATION / Country
*-----*
| ENTER COUNTRY: FRA |
*-----*
| => FRA |
| => ANG |
| => GER |
| => ... |
| => ... |
| => TWN |
| => BEL |
| => EXP |
*-----*
DO YOU CONFIRM (Y/N)? Y

```

- Enter the country code in case of modification.
- Confirm or reject the modification by pressing "y" or "n".

Configuring spoken languages

The spoken language configuration menu is used to define the 5 spoken languages used by the following MEDIA SERVER service functions:

- Announcement (ANN)
- Voicemail (IVB)
- Interactive Voice Response (IVR)

```

MiVoice 5000 Configuration / Spoken Language
An existing configuration was found
*-----*
| Enter Language 1 : FRA
| Enter Language 2 : ANG
| Enter Language 3 : GER
| Enter Language 4 : ESP
| Enter Language 5 : POR
*-----*

```

- If the 5 languages defined by default must be modified, press "**y**".
- The 5 spoken languages defined by default can be modified on the screen, among the ones proposed.

```
MIVOICE 5000 CONFIGURATION / SPOKEN LANGUAGE
*-----*
| ENTER LANGUAGE 1 :FRA
| ENTER LANGUAGE 2 :ANG
| ENTER LANGUAGE 3 :GER
| ENTER LANGUAGE 4 :ESP
| ENTER LANGUAGE 5 :POR
*-----*
|          ANG          CTL          DAN
|          ESP          FIN          FLA
|          FRA          GER          HOL
|          ITA          MDT          MEX
|          NOR          POL          POR
|          SUE          TCH          USA
*-----*
DO YOU CONFIRM (Y/N) (PRESS ENTER TO RECONFIGURE) ? Y
```

- For each of the 5 spoken languages, in case of modification, enter the language code.
- Press "**Return**" to validate each spoken language.
- Confirm or reject the modifications by pressing "**y**" or "**n**".

Configuring the license

```

MiVoice 5000 Configuration / Licence
*-----*
| Licence:                               |
*-----*
Do you want to change configuration Y(es)/N(o) ? n

```

- Enter the corresponding value of the release (optional: it may be entered later from Web Admin).

For a virtual or physical machine, during first installation, if the licence is not known, it is necessary to access Web Admin with Ctrl +i, and to follow the procedure described in Section Erreur ! Source du renvoi introuvable..

- Validate the modifications with the "**Return**" key, after confirming or rejecting them by pressing "**y**" or "**n**".

Configuring PARI

- To modify the system's PARI number, type in "**y**" and enter the corresponding value.
- Press "**Return**" to confirm this modification.
- Confirm or reject this modification by pressing "**y**" or "**n**".

Installing the services

This menu is used to install the following services:

- DHCP
- FTP
- TFTP
- SYSLOG
- Announcement
- IVR
- IVB
- CONF

If you wish to manage any of these services, you must install it in advance. Installing the service enables you to modify its status and configuration later via Web Admin.

The FTP service (accounts and storage directories) is automatically configured when the FTP service is started by Web Admin.

The TFTP service is automatically configured when the TFTP service is started by Web Admin. Menu Telephony service > System > Software maintenance > Tftp: loading of files is only accessible if the TFTP service is installed. This menu is used to place the firmware of terminals A6xxd, 312i and Mitel DECT-IP base stations (RFPs) in the TFTP server storage directory.

The SYSLOG service is configured manually, via Menu **Telephony Service>System>Expert>Processor access>Debug tools>Traces>Parameters**. The IP address configuration is only accessible if the SYSLOG service is installed and if the "step-by-step output" line is validated.

The DHCP service is automatically configured when the DHCP service is started. In a redundant MiVoice 5000 Server configuration, the DHCP service cannot be installed and managed by Web Admin. In this case, it is managed directly by the operating system.

The MEDIA SERVER service comprises the following four functions:

- Announcement: managing announcements and tones (255 announcements and tones maximum)
- IVR: managing the interactive voice response (15 scripts maximum)
- IVB: managing the integrated voicemail boxes (15000 IVBs maximum)
- CONF: managing three-way conferences

ATTENTION : G.711 (A law or μ law), G.729 and G.722 are available and are used by the announcement, IVR, IVB and conference functions of the MEDIA SERVER service.

ATTENTION : G.711 40ms and G.722 40ms are not supported by terminals A53xxip.

```

MIVOICE 5000 CONFIGURATION / MANAGED SERVICE
ACTUAL CONFIGURATION IS:
*-----*
| DHCP (0/1) :                0          |
| FTP (0/1) :                0          |
| TFTP (0/1):                1          |
| SYSLOG (0/1):              0          |
| SSH (0/1) :                0          |
| ANNOUNCEMENT (0/1):       1          |
| IVR (0/1) :                1          |
| IVB (0/1) :                0          |
| CONFERENCE(0/1) :         1          |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y/[N]? Y
*-----*

```

- To install a service, press "y". The next screen is used to modify the value of the DHCP, FTP, TFTP, SYSLOG, SSH, ANNOUNCEMENT, IVR, IVB and CONFERENCE fields. The values entered must be 0 (service not installed) or 1 (service installed).
- If any of the four functions ANNOUNCEMENT or IVR or IVB or CONFERENCE is installed, the MEDIA SERVER service is automatically installed.
- Press "Return" to confirm each modification.
- Then confirm or reject the modifications by pressing "y" or "n".

Configuring service start

The status of the FTP, TMA and DHCP services can be modified so they may or may not be started automatically. If a service is not configured to start automatically, Menu Telephony service>System>Configuration>Web Admin services can be used to start it manually later.

The FTP service is used to download via TMA the firmware and configuration files used by MiVoice 5300 IP Phones and Mitel 6000 SIP Phones and the firmware used by Mitel 53xx phones. Refer to the Terminal Installation Manual

The TMA service is used by TMA, and to manage IP and TDM terminals. Refer to the Terminal Installation Manual The TMA service configuration is accessible via the Web Admin terminal service menu.

The DHCP service allows a lease to be automatically assigned to MiVoice 5300 IP Phones and Mitel 6000 SIP Phones and negotiates with them the standard and specific parameters required to configure them. Refer to the Terminal Installation Manual

```

MIVOICE 5000 CONFIGURATION / SERVICES TO START AUTOMATICALLY
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| FTP (0/1) :                0 |
| TMA (0/1) :                1 |
| DHCP (0/1) :               0 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y/[N]? Y
    
```

- If the answer is YES, "y", the screen below can be used to modify the value of the FTP, TMA and DHCP fields. The values entered may be 0 (automatic service start) or 1 (manual service start via Web Admin).
- Press "Return" to confirm each modification.
- Then confirm or reject these modifications by pressing "y" or "n".

```

MIVOICE 5000 CONFIGURATION / SERVICES TO START AUTOMATICALLY
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| FTP (0/1) :                1 |
| TMA (0/1) :                1 |
| DHCP (0/1) :               1 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y/[N]? Y
    
```

FTP: value 0 or 1.

This field allows (1 = yes) or disallows (0= no) the use of the integrated FTP server on MiVoice 5000 Server during first installation. The FTP server must be active (1) to then use the integrated DHCP and TMA services.

Default value in factory settings: **FTP = 0**

TMA: value 0 or 1.

This field allows the use (1 = yes) or non-use (0= no) of the TMA service integrated into MiVoice 5000 Server. For management by MiVoice 5000 Manager, the integrated TMA service is inactive since management is centralised for all the terminals on MiVoice 5000 Manager.

Default value in factory settings: **TMA = 1**

DHCP: value 0 or 1.

This field allows (1 = yes) or disallows (0= no) the use of the integrated DHCP service on MiVoice 5000 Server.

If an external DHCP server is used, the DHCP service is inactive.

Configuring the deployment of Mitel 6700 SIP Phones

If DHCP is on 0 in the previous service start menu, the parameters TERMINAL VLAN and PC VLAN are proposed in the Mitel 6700 SIP Phone configuration menu.

```
MiVoice 5000 Configuration / SIP Mitel 6700 SIP Phone
An existing configuration was found
*-----*
|
| LLDP ENABLED : 0 |
| TERMINAL VLAN: |
| PC VLAN: |
*-----*
Do you want to change configuration Y(es)/N(o) ? N
```

LLDP ENABLED

This field is used to activate the LLDP in Mitel 6700 SIP Phone (1 = yes) or not (0= no).

TERMINAL VLAN and PC VLAN: These parameters are used to define the VLAN dedicated to Mitel 6700 SIP Phones. They are not mandatory on simple networks.

If DHCP is on 1 in the previous service start menu, the parameters TERMINAL VLAN and PC VLAN are not proposed in the Mitel 6700 SIP Phone configuration menu.

```
MiVoice 5000 Configuration / SIP Mitel 6700 SIP Phone
An existing configuration was found
*-----*
| LLDP ENABLED : 0 |
*-----*
Do you confirm (Y/N)?
```

- If necessary, modify the value of the LLDP field.
- Then confirm or reject these modifications by pressing "y" or "n".

DHCP server configuration

If the DHCP service had been previously installed, this menu can be used to automatically pre-configure the DHCP server for Mitel 6700 SIP Phones and for terminals A53xxip and i7xx.

IMPORTANT : This DHCP pre-configuration requires that the deployed network interface be called **eth0**.

If this is not the case, the DHCP server must be reconfigured later from Web Admin, following the procedure described in Section Modifying the DHCP server configuration from Web Admin.

```
Mitel 5000 Configuration / DHCP
*-----*
| SUBNET MASK :      255,255,255.0          |
| BEGIN RANGE  :      20.1.1.100           |
| END RANGE    :      20.1.1.199           |
| GATEWAY      :      20.1.1.254           |
| TERMINAL VLAN:                                     |
| PC VLAN:                                     |
*-----*
Do you confirm (Y/N) (Press enter to reconfigure) ? y
```

SUBNET MASK: subnet mask dedicated to IP and SIP terminals

BEGIN RANGE and END RANGE: address range dedicated to IP and SIP terminals

GATEWAY: IP address of the network gateway dedicated to the IP and SIP terminals

TERMINAL VLAN and PC VLAN: These parameters are used to define the VLAN dedicated to Mitel 6700 SIP Phones and to terminals A53xxip and i7xx. They are not mandatory on simple networks.

- Press "**Return**" to confirm each input.
- Then confirm or reject the modifications by pressing "**y**" or "**n**".

Configuring Name & IID

The system's general parameters declaration screen opens (name IID (system identification number)):

```
MIVOICE 5000 CONFIGURATION / Name&IID
*-----*
| DO YOU WANT TO CONFIGURE NAME/IID (Y/N) : Y |
```

- If you answer YES, "**y**", the next screen allows you to declare the system's general parameters (11 digits).

```
MIVOICE 5000 CONFIGURATION / Name&IID
*-----*
| NAME: MIVOICE 5000 |
| IID: 00130927001 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

- Press "Return" to confirm the modifications.
- Then confirm or reject the modifications by pressing "y" or "n".

Configuring the numbering plan length

```
MIVOICE 5000 CONFIGURATION / NL
*-----*
| DO YOU WANT TO CONFIGURE NUMBERING LENGTH: Y |
*-----*
```

- Press "**Return**" to confirm, after entering "**y**" or "**n**".

If the answer is "y", enter the corresponding values.

The field is used to define the internal number length to take into account (2 to 6).

```
MIVOICE 5000 CONFIGURATION / NL
*-----*
| NUMBERING LENGTH: 4 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

- Press "Return" to confirm the modifications.
- Then confirm or reject this modification by pressing "y" or "n".

Configuring call distribution

```
MIVOICE 5000 CONFIGURATION / NL
*-----*
| DO YOU WANT TO CONFIGURE NUMBERING LENGTH: Y |
*-----*
```

- Press "**Return**" to confirm, after entering "**y**" or "**n**".

If the answer is "**y**", enter the corresponding values.

```
MIVOICE 5000 CONFIGURATION / Call Dist
AN EXISTING CONFIGURATION WAS FOUND
*-----*
| SUBSCRIBER: 3005 |
| DID: 4000 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

SUBSCRIBER

This field allows you to assign a subscription number as a day number reduced to reception 0. This number is assigned if it corresponds to an internal subscription which can be added to a call distribution service, or if it corresponds to the number of a subscription that may be on the multi-site network (MiVoice 5000 Server).

DID

This field is used to assign a DID number to call distribution service0. Authorised characters are "0123456789ABCDE".

- Press "**Return**" to confirm the modifications.
- Then confirm or reject the modifications by pressing "**y**" or "**n**".

Configuring subscriptions

```
MIVOICE 5000 CONFIGURATION / Subscribers
*-----*
| DO YOU WANT TO CONFIGURE SUBSCRIBERS (Y/N): Y |
*-----*
```

If the answer is "y", enter the corresponding values for the different fields described below.

```
MIVOICE 5000 CONFIGURATION / Subscribers
*-----*
| CREATION (0/1) : 1 |
| IVB CREATION (0/1) : 1 |
| UNIFIED IVB (0/1): 1 |
| FIRST : 3000 |
| LAST : 3999 |
| DID NUMBERING LENGTH 4 |
| FIRST DID : 3000 |
| FIRST PUBLIC DID : +33(0)130923000 |
| IVB : 3998 |
| COMMON SUBSCRIBER : 3500 |
| ADDITIONNAL SUBSCRIPTIONS : 40 |
| PASSWORD SUBSCRIBERS: 0000 |
*-----*
DO YOU WANT TO CHANGE CONFIGURATION Y(ES)/N(O) ? Y
```

CREATE

This field may be used to inhibit automatic subscriber creation. This field may take on the values 0 (= creation inhibited) or 1(= creation authorised).

The **numbering length** field defined on the previous screen contains the internal number length to take into account (2 to 6). If this is a valid value, the fields **first**, **last**, **common subscriber** will be taken into account. Otherwise, they will be ignored.

IVB CREATION

This field is used to automatically create the voicemail boxes associated with the automatically created subscriptions. This field is only proposed if the IVB function is installed.

UNIFIED IVB

The **Unified IVB** field is used to define some unified voice mail boxes, if available.

FIRST

This field contains the first internal subscription that can be created automatically.

LAST

This field contains the last internal subscription that can be created automatically.

DID numbering length

This field is used to define the internal number length in the incoming number plan (i.e. DID numbers).

FIRST DID

This field is used to create the external block 0 associated with the internal number block [first, last]. Authorised characters are "0123456789ABCDE". For this block to be created, this number must belong to an incoming number plan.

FIRST PUBLIC DID

The field is used to associate a public number (format: 0130967000 or +33(0)130967000) with the DID number for block 0. This ASCII string will be truncated to 20 characters.

IVB

This field is used to define the IVB access number. This field is only proposed if the IVB function is installed.

COMMON SUBSCRIBER

This field is only read and taken into account if it is in the complete block and if this number exists already. If this is not the case, or if the field does not exist, they are assigned a default number. If their value is 0, they will not be assigned any number. The **common subscriber** field must always have a number.

ADDITIONNAL SUBSCRIPTIONS

This field indicates the number of further internal subscriptions to create.

Password Subscribers

This field is used to define the default subscriber password.

This same password will be used to access the IVB and to deploy Mitel 6000 SIP Phones.

Generation of sets authentication=1

This field is used to activate/deactivate the generation of a terminal authentication during subscription creation. The default value is 1 = YES => terminal authentication generated during subscription creation. This is the case during a first installation, for instance.

Managing the assignment of numbers to subscriptions:

Create a general-purpose subscription.

If automatic creation is authorised, for each subscriber equipment detected, create a subscription, assign it a DID number (read in the external block), or assign it a voice mail box if creation is authorised. Then update its LDAP directory record with the internal number and possibly DID number. Then assign this subscription to the detected equipment and then go to the next equipment.

After processing all the equipment, if automatic creation is allowed, create as many additional subscriptions as necessary (and as possible). Assign them a DID number (read in the external block) and a voice mail box if automatic creation is authorised, then update their LDAP directory record with the internal number and possibly DID number.

- Press "**y**" and confirm by pressing "**Return**".

- The screen then displays a summary of the configuration made (example).

```

| SUMMARY:
*-----*
| IPADR = 20.1.1.1          |
| NAME = MIVOICE 5000     |
| IID = 00130927001      |
| FIRST : 3000            |
| LAST : 3999             |
| DID NUMBERING LENGTH 4  |
| FIRST DID : 3000        |
| FIRST PUBLIC DID : +33(0)130923000 |
| IVB : 3998              |
| NUMBERING LENGHT = 4    |
| COUNTRY = FRA           |
| LICENCE = 123456789123  |
| PARI =                   |
| START UP TYPE = TOTAL   |
| DEDICATED SNMPD = Y     |
|                           |
*-----*
DO YOU WANT TO APPLY YOUR CHANGE Y(ES)/N(O)/R(ECONFIGURE) ? Y

```

If the summary is not correct:

- Press "**r**" to restart the preconfiguration (from the first "Choose country" screen).

If the summary is correct:

- Press "**y**" if the values displayed are correct and confirm by pressing "**Return**".

Wait for the end of the script (**Configuration ended**) then press **Return**.

Restart the VM from the User menu so the configuration can be taken into account.

SELECT AN OPTION AND PRESS ENTER:

1) REBOOT	6) UPDATEOS-SECURITY	11) IDENTIFICATION
2) NETWORK	7) TOTAL	12) KEYBOARD
3) SET-NTP-SERVER	8) STANDARD	13) LOGOUT
4) PASSWORD	9) BACKUP-SPECIFIC	
5) UPDATEOS-FULL	10) RESTORE-SPECIFIC	

SELECT AN OPTION AND PRESS ENTER: **1** -----> (**PRESS 1 TO RESTART**)

Wait for the end of the (**Configuration ended**) script then close the script window.

- Wait for the end of the start operation.

The configuration phase is ended, and the desktop is displayed again with all the MiVoice 5000 Serve icons.

Initial installation has been completed and you can now configure the site (see MiVoice 5000 Web Admin operating manual).

Checking and modifying the DHCP configuration

For more details, see Section Modifying the DHCP server configuration from Web Admin.

In Menu **DHCP - Management "- Modify a subnet:** The **eth0** interface must be replaced with **br0**).

Configuration DHCP opérationnelle : 14-10-2015 11-00-28
Modification d'un sous-réseau

Configuration DHCP actuelle : 20-10-2015 12-03-25

Valider Annuler

Paramètres de configuration

Nom du sous-réseau Network Hôtes
Ajouter

IP du sous-réseau 192 . 168 . 50 . 0 Exclusions
Ajouter

Masque de sous-réseau 255.255.255.0/24

Début de tranche 192 . 168 . 50 . 3 Fin de tranche 192 . 168 . 50 . 200 Bootp dynamique

Durée de bail par défaut 1209600

Durée de bail max 1209600 

Interface br0

Routeur 192 . 168 . 50 . 1

Adresse du serveur NTP 192 . 168 . 0 . 190

Adresse du serveur DNS 192 . 168 . 0 . 180

Nom du domaine mycompany_DHCP.com

Masque de sous-réseau optionnel 255.255.255.252/30

Permis known-clients

Gamme : 6xxx Modèle : all_models

1.4 ACCESSING THE (WEB ADMIN) USER INTERFACE

The operating console is connected to the same network as the iPBX (CPU card LAN port).

- Open a web browser installed on the operating console (Internet Explorer, for instance).
- Enter the IP address defined in the system: `https://@IP` (secure access mode).

Note : Address defined while installing the OS corresponding to the IP address of the MiVoice 5000 Server network card.

- Some security windows for this "https" access mode are then displayed successively; enter "YES" for each of them.
- The Web browser (Internet Explorer, for instance) displays a security alert when connecting to Web Admin, this alert can be disabled. Refer to the appendix of this document paragraph Taking the security certificate into account.

A login window opens.



- Enter the default access login: **admin**
- Enter the default access password: **admin**

Password policy and immediate password change

During first connection:

The default password is the one assigned to the administrator. This value must be changed immediately and customised by the user if the administrator has enabled a password policy. Refer to the document MiVoice 5000 Server - Operating Manual

Subsequently:

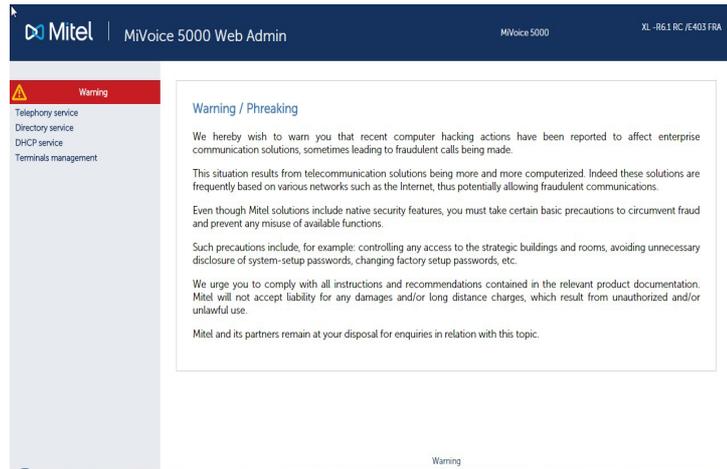
The user will also be able to change it, from the home page in the menu on the left **Password modification** (if the policy is enabled).

If it expires, a message is displayed indicating that it must be changed (if the policy is enabled).

However, if the user forgets the password, they must contact the administrator again.

Once you have logged in, the Web Admin home screen is displayed.

The first time you are logging on, the welcome screen displays a page alerting you to the risks of piracy and to the security constraints.



After reading this message:

Click any of the **Warning** buttons.

On the next screen that opens, displaying this message, tick **I have read this text**.

Click **OK** to confirm.

The actual Web Admin welcome screen is then displayed, giving access to all the menus:



For more information about the display of this warning message, see Section MITEL's legal warning concerning Web Admin access.

Certificate download menu

This menu is a link for downloading the self-signed SHA2 certificate provided by Mitel.

The certificate is used to secure the connection between the Web Admin and the User Portal interfaces with MiVoice Manager, in particular.

The assigned certificate may also be external.

Certificates are managed and assigned from Menu **SYSTEM>Security**.

Refer to the following documents in the chapters concerning Security/Certificates:

- MiVoice 5000 Server - Operating Manual
- MiVoice 5000 Manager User Guide

This link appears systematically during a first installation or after upgrading to R8.X for sites or nodes (Cluster Configuration) whose initial version is below R8.X.

This link no longer appears if a certificate (Mitel or external SHA2) has been downloaded into the iPBX either locally or from MiVoice 5000 Manager.

1.5 DECLARING THE LICENCES FOR VIRTUAL OR PHYSICAL MIVOICE 5000 SERVER

MiVoice 5000 Server may be virtualised in R5.2 SP1 and later. In this case, the dongle is equally virtual and is delivered with the MiVoice 5000 Server package.

For a first installation, the licence is not obtained directly and depends on the installation code to be generated from Web Admin.

This installation code is specific to each iPBX.

It must first be generated by the installer (from Web Admin).

Two methods of obtaining the licence are proposed after this code is generated:

- **Automatic mode** (as of R5.3 SP1 minimum): this allows direct and automatic access to the licence server which returns the licences in real time.
- **Manual mode** (currently available): connecting manually to the Mitel licence server. The installation code can be regenerated on the conditions indicated in Section Precautions for use.

1.5.1 AUTOMATIC MODE

As of R5.3 SP1, a new method of connecting directly to the Mitel licence is proposed by the **Getting the keycode** button, in Menu **TELEPHONY>SYSTEM>Info>Licences**, in order to automatically obtain the licence key, associated with the installation code, directly in the iPBX.

It is all about automatically retrieving the license key associated with a virtualised MiVoice 5000 Server installation via an http request on the Mitel server (<https://support.mitel.fr/akop/genlicence.php>).

The licence thus returned is automatically taken into account by the iPBX, and the functions concerned are unlocked and displayed in this same menu.

This menu can only be used if the virtual MiVoice 5000 Server has an internet access, associated with a correct DNS resolution.

Manual mode must be applied for all users wishing to isolate their network from the internet (see Section Manual mode).

How to obtain licences in automatic mode

In Menu **TELEPHONY>SYSTEM>Info>Licences**, enter successively:

- The identification number
- The IP address of the virtual machine
- Installation IID number.

IMPORTANT : All these fields must be filled in.

The IID number entered to define the installation code of an MiVoice 5000 Server contains the number of an answering service or subscriber in the format sent by the operator (before translation).

Note : This field must have the prefix 0 when it contains less than 8 digits.

- Then click the **Installation code generation** button.

The installation code frame then gives the value of the installation code.

- Click Getting the keycode.

Connection to the licence server is then automatically set up and shortly thereafter the licences are received and taken into account by the iPBX.

Refresh the browser window (using the **Actualize** or **F5** button). The status of the licences in question is then **AUTHORISED** in the corresponding table.

If later the characteristics of the IP address and IID number system are modified, the installation code will be regenerated following the procedure described in Precautions for use.

1.5.2 MANUAL MODE

Note : It is better to use Internet Explorer to access Web Admin; this will make it easier to copy the values required to generate the licence. See Installation code below.

In Menu **TELEPHONY>SYSTEM>Info>Licences**,, enter successively:

- The identification number
- The IP address of the virtual machine
- Installation IID number.

IMPORTANT : All these fields must be filled in.

The IID number entered to define the installation code of an MiVoice 5000 Server contains the number of an answering service or subscriber in the format sent by the operator (before translation).

Note : This field must have the prefix 0 when it contains less than 8 digits.

- Then click the **Installation code generation** button.

The installation code frame then gives the value of the installation code.

- Click the **License server access** link.
- Log in to the license server and enter the installation code.

This server then generates the actual licence for the function requested for during the order.

- Save this licence using the **Export .txt file** link.

Return to the same menu **TELEPHONY>SYSTEM>Info>Licences**.

- Enter this licence in the **keycode** field of this same menu.

The functions in question are then authorised.

It is advisable to store this licence value in a text file.

If later the characteristics of the IP address and IID number system are modified, the installation code will be regenerated following the procedure described in Precautions for use.

1.5.3 CHECKING THE VIRTUAL DONGLE VALIDITY

Periodic checks are carried out on the activity passing through the IP access, and the IID number related to the ID of this type of dongle.

Starting from the 30th day, a message is sent to the logbook mentioning the inactivity of one of these two accesses.

If no activity is detected in the next 30 days, the license is removed.

1.5.4 PRECAUTIONS FOR USE

The installation code is unique, and the generated keycode can only work with an installation code.

If an installation code is generated without obtaining a new keycode, the functions subject to a licence are closed within one hour.

To manage the different cases that require a change of installation code during the life of the system and, in particular, the cases encountered 24/7, it is now possible to change the installation code without asking Mitel first.

After this change, you will no longer have the right to make any modification and you must first contact Mitel to explain why you need to make any modification (change of user, physical replacement of the platform, network modification, etc.).

After analysing your request, you will again be authorised to modify the installation code.

During a consultation on the licence server ("search for a key"), the right to modify the installation code on the identification number concerned is indicated via the following information:

- Modification of installation code **allowed**
- Modification of installation code **not allowed**

Reminder: the IID number is the installation number, and you must check that it is regularly called up. If this is not the case, some error messages appear in the logbook after one month then the functions are locked.

1.6 RESETTING THE MANUFACTURER ACCESS CODE

Contact Mitel technical support.

1.7 IMPORTING DATA INTO THE IPBX FROM THE DATA COLLECTION FORM

Before importing the data, the administrator must back up the iPBX configuration so as to be able to restore it if some .csv files had been wrongly configured.

Data is imported into the iPBX via Web Admin from Menu **Telephony service>System>Software maintenance>Massive import**:

- Select and download the file Data.Collecting.zip
- Click Take account of the data.

The duration of import depends on the amount of data to be downloaded. Some counters are displayed to indicate the work progress status.

- Example of counter 12/38: 15
 - 38: number of files to be imported,
 - 12: number of files being imported,
 - 15: line processed in the file being imported.

An installation report is generated at the end of the import.

1.7.1 REMINDER

The data collection form contains a specific tab for the configuration parameters required for the Ctrl + i phase.

The following files are created after the iPBX data are generated:

- A DataCollecting.zip file, containing the different .csv files from the collection and used by Web Admin (example: 002.Mitel.DataCollecting.zip).
- 7450_Formulaire.xls (Excel 2003) to be imported into MiVoice 5000 Manager. It contains the data required to configure UCP and TWP accounts.

The generated files are placed in the same directory as the one in which the form is installed.

Some additional information is provided in the data collection Excel file - Help tab.

1.8 ADDITIONAL CONFIGURATIONS

1.8.1 STARTING AND VIEWING THE SERVICES

You can configure the services (LDAP, SNMP, GSI, FTP, TFTP, etc.) and display their status from Menu **"SYSTEM>Configuration>Services"** in Web Admin. See the document MiVoice 5000 Server – Operating Manual

1.8.2 DECLARING AN NTP TIME SERVER

It may be necessary to synchronise an NTP server, especially for some terminal types.

The NTP server address can be defined, and NTP activated in Menu "**System>Administration>Date and time**", by selecting the tab "**Time server synchronisation protocol**".

2 UPGRADING SIMPLEX OR DUPLEX MIVOICE 5000 SERVER SOFTWARE

The software update method is exclusively the Repository method, regardless of whether the system is with or without MiVoice 5000 manager.

Refer to the document Updating by repository.

Case of upgrading from versions < R8.x to R8.x

A procedure for upgrading to R8.x is mandatory for any virtual or physical system below R8.x.

Refer to the document **MiVoice 5000 Server/Manager and EX Controller - Upgrading to R8.x**.

3 APPENDICES

3.1 MOUNTING AN ISO IMAGE

The mounting point must exist.

- Enter the following commands:

```
mkdir /mnt/iso
```

- Copy iso under /tmp

```
mount /tmp/CD**** /mnt/iso
```

3.2 TAKING THE SECURITY CERTIFICATE INTO ACCOUNT

A security alert is displayed the first time Web Admin is accessed via a web browser (Internet Explorer).

Therefore, you have to indicate to the web browser that the company is a reliable certification authority.

Note : If you have any problem accessing Web Admin or while reinstalling a certificate, delete the certificates previously installed on the Client terminal for this iPBX.

If the certificate which secures the Administration interface (Web Admin access) or End User interface (User Portal access) is generated by MiVoice 5000, the **Download link for the certificate generated by MiVoice 5000** (Web Admin welcome page) must be used to obtain this certificate in order to install it on the PCs accessing any of these two functions (see next section).

Managing the certificates with the browsers

The certificate must be manually added in Firefox. For the other browsers, use the Microsoft certificate manager:

Click **Start**, then in the search field, type in **mmc** then press **Enter**.

The management screen opens:

3.2.1 FOR THE MITEL 5000 RANGE

- Open a web browser installed on the operating console (Internet Explorer, for instance).
- Enter the IP address defined in the system: `https://@IP` (secure access mode).

Note : Default address in factory setting: **192.168.65.01**

- After the warning message:
- Click Continue with this site (not recommended).
- In the menus by the left, click **Download the certificate**.
- Click **Open** in the banner displayed below.
- On the next screen, in the **General** tab, click **Display the certificate**.

- Click Display the certificate.
- Click **Next**.
- Tick the line Place all certificates in the next store, then click Next.
- Select Trusted root certification authorities, then OK.
- Click **Next**.
- Click **Finish**.

A security warning is then displayed.

- Click **YES**.

The certificate is installed.

- Click **OK**.

The installation has been completed.

- Close all the browser windows.
- Log on to Web Admin via <https://@IP>. The security warning is no longer available.

3.3 MITEL'S LEGAL WARNING CONCERNING WEB ADMIN ACCESS

To alert site users to the risks of piracy and the security constraints, a warning message to the different users is displayed on Web Admin.

This message is displayed when you first log on to Web Admin, or remains accessible later in form of a link if it has not yet been validated.

It works as follows:

As long as a user has not validated the message, the message is displayed on the welcome page; a link is then used to display the validation page.

This link (**Warning** button) is visibly displayed in red on all the pages of the site, on the top left side.

Once a user validates this message, the picture normally displayed on the welcome page finds its place, and only a link at the bottom of the Web Admin welcome page can be used to view this new message.

Welcome page before validation

If the warning message has not been validated, the welcome page is displayed:

Two links are available to call up and display the warning validation page. First of all, on the top left side of the page the **Warning** text on a red background is a first link. The second one is located at the bottom, represented by the **Warning** text.

On the other pages of the site and as long as the message has not been validated a **Warning** link remains displayed on the top left side of the page, on a red background.

Warning message validation page

On this page the "Web Admin welcome" link on the top left side can be used to return to the welcome page without validating the message.

To validate the message, tick the box located below the warning message then press the **OK** button located by the checkbox.

The login of the person validating the warning, as well as the validation date, is stored by the system.

If the **I have read this text** checkbox is not ticked, no action is taken if you press the **OK** button.

It is authorised to validate the warning before the end of the console release timeout (basically 10 minutes). At the end of this timeout the login window opens and you are automatically returned to the Web Admin welcome page (the login/password depends on the account logged onto).

Web Admin page after validation

On this page, only the **Warning** link located under the picture can be used to go to the page which displays the warning.

On the other pages, no link can be used to display the warning.

Warning display page after validation

This page, which no longer offers the possibility to validate the warning, offers only one Web Admin **Welcome** link used to return to the AMP welcome page.

3.4 MODIFYING THE DHCP SERVER CONFIGURATION FROM WEB ADMIN

Modifying the DHCP server configuration is necessary when the network interface used is not called eth0 but has another name defined for this server's network interface.

The modification is made in five phases:

Phase 1: "DHCP - Operation" menu: request the modification of subnets ("network" pencil)

The screenshot displays the DHCP configuration web interface. On the left is a sidebar menu with the following items: Accueil Web Admin, DHCP - Création, DHCP - Exploitation, Gestion des templates, Restauration - Suppression, Redémarrer le service DHCP, Etat du service DHCP, Visualisation de la configuration DHCP, and Visualisation des baux DHCP. The main content area is titled 'Configuration DHCP opérationnelle : 14-10-2015 11-00-28' and 'Edition des paramètres globaux'. Below this, it shows 'Configuration DHCP actuelle : 20-10-2015 12-03-25'. There are 'Valider' and 'Générer' buttons. The configuration options include:
- Type de mise à jour du DDNS: none
- Le réseau fait autorité
- Ignorer: bootp
- Adresse locale: [] . [] . [] . []
- Identificateur du serveur: [] . [] . [] . []
- Gamme : 6xxxi Modèle : all_models
- Condition discriminante : "AstralPPhone"
- Paramètres de l'option 43
- Gamme : Dect Modèle : Ip
- Condition discriminante : "OpenMobility"
- Paramètres de l'option 43
- "Vendor Class" : OpenMobility
- Gamme : 6xxxi Modèle : 6751i
- Gamme : 6xxxi Modèle : 6753i
- Gamme : 6xxxi Modèle : 6755i
- Gamme : 6xxxi Modèle : 6757i
On the right, there is a 'Sous-réseaux' table with one entry 'Network' and an 'Ajouter' button highlighted by a black arrow.

Step 2: In Menu “DHCP - Management” - **Modify a subnet:** correct the interface name (“eth0”), to be replaced with the name defined on the server PC (“em1” or “br0” for example).

Configuration DHCP opérationnelle : 14-10-2015 11-00-28

Modification d'un sous-réseau

Configuration DHCP actuelle : 20-10-2015 12-03-25

Paramètres de configuration

Nom du sous-réseau

IP du sous-réseau . . .

Masque de sous-réseau
Hôtes

Début de tranche . . . Fin de tranche . . . Bootp dynamique

Durée de bail par défaut

Durée de bail max

Interface
Exclusions

Routeur . . .

Adresse du serveur NTP . . .

Adresse du serveur DNS . . .

Nom du domaine

Masque de sous-réseau optionnel

Permis

Gamme : 6xxx Modèle : all_models

Step 3: In Menu “DHCP - Management” - **Modify a subnet:** check the modification at the bottom or on top of the page.

Gamme : 6xxx Modèle : 6735i
 Gamme : 6xxx Modèle : 6737i
 Gamme : 6xxx Modèle : 6739i
 Gamme : 6xxx Modèle : 6710i
 Gamme : 6xxx Modèle : 6863i
 Gamme : 6xxx Modèle : 6865i
 Gamme : 6xxx Modèle : 6867i
 Gamme : 6xxx Modèle : 6869i
 Gamme : 6xxx Modèle : 6873i
 Gamme : BluStar Modèle : 8000i
 Gamme : BluStar Modèle : Vpn
 Gamme : wifi Modèle : 312i
 Gamme : i7xx-A Modèle : i740-i760
 Gamme : i7xx-B Modèle : i740-i760
 Gamme : 53xxip Modèle : 6xip-70ip-80ip

Condition discriminante : 'Amadeus IP Phone'

Paramètres de l'option 43

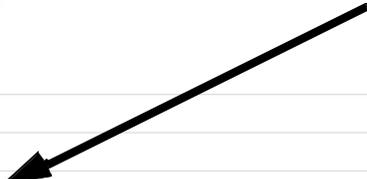
Gamme : Dect Modèle : Sip
 Gamme : UC360 Modèle :
 Gamme : TA7102i Modèle :

Step 4: "DHCP - Management". Ask for the regeneration of the DHCP configuration at the bottom or on top of the page. **Generate** button.

Gamme : 6xxx Modèle : 6734i
 Gamme : 6xxx Modèle : 6735i
 Gamme : 6xxx Modèle : 6737i
 Gamme : 6xxx Modèle : 6739i
 Gamme : 6xxx Modèle : 6710i
 Gamme : 6xxx Modèle : 6863i
 Gamme : 6xxx Modèle : 6865i
 Gamme : 6xxx Modèle : 6867i
 Gamme : 6xxx Modèle : 6869i
 Gamme : 6xxx Modèle : 6873i
 Gamme : BluStar Modèle : 8000i
 Gamme : BluStar Modèle : Vpn
 Gamme : wifi Modèle : 312i
 Gamme : i7xx-A Modèle : i740-i760
 Gamme : i7xx-B Modèle : i740-i760
 Gamme : 53xxip Modèle : 6xip-70ip-80ip
 Condition discriminante : "Amadeus IP Phone"

Paramètres de l'option 43

Gamme : Dect Modèle : Sip
 Gamme : UC360 Modèle :
 Gamme : TA7102i Modèle :



Phase 5: Restart the DHCP service.

Mitel | Service DHCP

Accueil Web Admin

DHCP - Création

DHCP - Exploitation

Gestion des templates

Restauration - Suppression

Redémarrer le service DHCP

Etat du service DHCP

Visualisation de la configuration DHCP

Visualisation des baux DHCP

Configuration DHCP opérationnelle : 20-10-2015 13-09-20

Edition des paramètres globaux

Configuration DHCP actuelle : 20-10-2015 13-06-07

Type de mise à jour du DDNS none

Le réseau fait autorité

Ignorer bootp

Adresse locale . . .

Identificateur du serveur . . .

Gamme : 6xxx Modèle : all_models

Condition discriminante : "AstralPPhone"

Paramètres de l'option 43

Gamme : Dect Modèle : Ip

Condition discriminante : "OpenMobility"

Paramètres de l'option 43

"Vendor Class" OpenMobility



3.5 CONFIGURING THE FIREWALL FOR MIVOICE 5000 SERVER

The following table gives the list of ports to open for MiVoice 5000 Server installation.

PROTOCOLE	PORTS	APPLICATION
TCP	3198-3199	i2052, i2070, i7xx
TCP	3209	i2052
TCP	3200 et +	Refer to the list in the table below.
TCP	21	675xi/53xxip Download (FTP)
TCP	69	675xi/RFP Download (TFTP)
TCP	443	File Transfert (AM7450)
TCP	389	LDAP
UDP	40000-40078	i2052, i7XX, 675xi, PTx
UDP	30000-30001	53xxip
UDP	5060	675xi, 53xxip, OMM, RFP
UDP	123	NTP Server
UDP	67-68	DHCP Server
UDP	161-162	SNMP Agent
UDP	1998, 41000-41999	Tunnel Data
UDP	16320-16391	RFP
UDP	8106-8107	RFP
LDAPS	636	In case of a secure connection to the directory (TLS).

Additional items on the list of TCP ports used by the internal servers of MiVoice 5000 Server.

TCP-IP PORT	INTERNAL SERVER OR SERVER ACCESS	SERVER ADDRESS	MODE	CALL DATA
3200-3203	Reversed			
3204	KTAXE server (records)	012	Non D	
3205	Reserved			
3206	EAS Server (for LCR and TPS)	013	TPKT	"SAESAE"
3207	Reserved			
3208	H.323 Server (for H.323/MOVACS gateway)	01191	TPKT	
3209	Gateway Server for Attendant Console and Software phone on PC (TD/PC)	01190	TPKT	
3210	Reserved			
3211	CSTA Server	011600	Non D	
3212-3216	Reserved			
3217	MUFACT Server (Record multiplexer with communication records and service records, with alarms)	01410030	TPKT	
3218	EAS Server for ACD (For M7403 for instance)	013	TPKT	
3219	Reserved			
3220-3283	Internal Call Server By the TAPI Gateway		TPKT	
3284-3287	Reserved			
3288	MUFACT Server (Record multiplexer with only service records/alarms)	014130	TPKT	
3289-3290	Reserved			
3291	MUFACT Server (Record multiplexer with only communication records)	014100	TPKT	

3.6 USING THE MASSIVE CREATION FORM

3.6.1 CONSIDERATIONS

This section only describes how to massively create the following data, from the blank form provided:

- External data
- Programming keys for each subscription (maximum 64)
- Secondary numbers for multi-line subscribers.

For other management functions available from Web Admin, especially export/import and the associated processing operation (update of technical characteristics, modification of internal directory records, modification of external directory records, etc.), see the chapters **Export function and Massive data import** in the MiVoice 5000 Server operating manual.

3.6.2 INTRODUCTION

The Excel form allows massive configuration of Mitel 5000 systems during first installation.

It is advisable to keep an original copy of this file in Excel format.

This basic form comprises 3 tabs allowing respectively the massive creation of the following items:

- External records
- Key programming for each subscription (maximum 64)
- Secondary numbers for multi-line subscribers.

Each tab is saved separately in **.csv** format to generate a single, unique file per column.

The generated files will have to be imported one by one during the **Massive import** phase from the Web Admin menu **System>Software maintenance>Massive import**.

The data thus generated in **.csv** format will be compatible with the Mitel 5000 systems during massive import. This data may later be processed as any other parameter data type, using the **Export** function.

For a multi-site network, only one **.csv** file must be generated (from the Excel form) on the reference directory site for massive import.

This procedure applies if there is no MiVoice 5000 Manager Centre on the installation.

3.6.3 STRUCTURE AND CONTENT OF THE EXCEL FORM

3.6.3.1 *Structure*

The file comprises three tabs:

- External record creation tab
- Selection keys tab
- Multi-lines tab

Each tab contains respectively the fields that can be completed in the corresponding Web Admin menu (in the example, **Creation of external record**).

On each tab:

- The cells on the first line (Line 1) indicate the labels of the parameters to be exported, corresponding to the fields to be completed in Web Admin.
- The cells on the second line (line 2) indicate the invariable internal codes for these parameters. These codes are used by the MiVoice 5000 system software, in the corresponding menu, to interpret the values to be taken into account during import in **.csv** format. In the above example, all the parameters refer to Value 5030 in the cell **A2** (internal code of the menu **Creation of external record**).
- The cells on the following lines (as from line 3) are to be filled in with massive creation parameters. A line will only be taken into account if the value YES is entered in the **Confirmation** cell for this same line.

ATTENTION : The first two lines should never be modified by the user.

3.6.3.2 *Instructions for use*

The file is created exhaustively from the settings database available in Web Admin (alphanumeric values, options, dependences of certain data families).

All creations must be made in Excel format.

Back up systematically the latest version of these files before converting them to **.csv** format.

Use only a blank form (basic form) for each new creation meant for a new massive import. Do not re-use an old file already subjected to massive import.

For cells involving an options list, see the options offered in the menu in question so as to respect the syntax (see also the next sections).

The cells to be filled in must be in text format, to avoid random changes resulting from the default settings of Excel (010 which becomes 10 in column F in the previous example).

Depending on the system configuration, some columns do not need to be filled in (single-company, extension characteristics, rights, etc.).

Some columns and associated cells are hidden intentionally in the original form, to improve display. These fields correspond to those not modifiable from Web Admin menus.

The characters used must be alphanumeric characters (the same syntax as for Mitel 5000 system management).

For values which must not be modified in import, fill in the corresponding cells with the label **#NO_CHANGE#**.

The massive creation settings must be entered in the language currently used in Web Admin (example: in English YES, NO, red list, etc.).

IMPORTANT : Enter **YES** in the **Confirmation** column for each line to be taken into account in massive creation (before saving it in .csv format). If these cells are not filled in, they will not be taken into account during massive import.

3.6.3.3 *Backing up the file in .csv format*

After filling in the tab:

- Select **File/Save As**.
- Name the file.
- Select the format "CSV (separator: semicolon) (*.csv)"
- Click **Save**.

The converted file is then available for massive import from Web Admin in Menu **System>Software maintenance>Massive import**.

Note : If this file still needs to be modified before import, when re-opened, some formats will be lost, especially the numeric values starting with 0. In this case, these cells must be filled in again as indicated previously. After the modifications, check systematically the value of the **Confirmation** cells for each line.

3.6.3.4 *Importing and opening a .csv file in Excel as a non truncated text file*

Some contents of the cell may be truncated when a .csv file is directly opened with Excel.

In this case, it is preferable to use the following procedure to specify how to import the .csv file:

- Open **Excel** from the **Start** menu.
- Open an empty file.
- Select the **Data** tab.
- Select the **External data** option then **From the text** or **Text file** (depending on the Excel version).
- Search for the .csv file then click **Import**.
- In the Text importation wizard, tick the **Delimited** box then click **Next**.
- Tick the **Semi-colon** box then click **Next**.
- Tick the **Text** box.
- Click **Finish**.
- Click **OK**.

The file is opened in non-truncated text mode.

3.6.4 EXTERNAL RECORD CREATION TAB

For the correspondence with the possible options and values and their syntax, refer to the document MiVoice 5000 Server - Operating Manual.

3.6.5 SELECTION KEYS TAB

This part of the form is used to configure 5 keys per subscriber.

For the correspondence with the possible options and values and their syntax, refer to the document MiVoice 5000 Server - Operating Manual.

Refer also to the respective terminal documentation for information on the number of programmable keys.

3.6.6 MULTI-LINES TAB

For the correspondence with the possible options and values and their syntax, see MiVoice 5000 Server - Operating Manual.