Managing DID numbers

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1 ABOUT DID NUMBER MANAGEMENT

1.1 PURPOSE OF THIS DOCUMENT

This document describes how to implement the feature described in Paragraph 2.2.

1.2 TERMINOLOGY

1.2.1 TERMS AND ABBREVIATIONS

Mitel 5000 Gateways	This term refers to all the systems and AX gateways.
MiVoice 5000 or MiVoice 5000 Server⊺	elephone switching system hosted by a PC running with Linux Redhat (included EX)
XS, XL, XD MiVoice 5000 physical gatew	/ays.
XS	This term includes XS, XS12 and XS6 systems
MiVoice 5000 Manager	Pool management centre
Multi-directory subsciber:	Subscriber for whom some additional numbers are defined. Each additional number is associated with a PSTN, TL plan, etc.).
Web Admin	Mitel 5000 Web Admin - User interface
LDAP	Light Directory Access Protocol
IID	Installation ID. General number used to reach subscribers who do not have any DID numbers (in general, a call distribution service)
AID	Additional installation ID. Direct number used to reach a subscriber from outside (public switched network via a trunk)
Internal number	Number assigned to a subscriber from an internal numbering plan and used for internal calls.
Location	This attribute is added to the LDAP directory in order to assign a (geographic) location to each MiVoice 5000 Manager internal number.
DID	Direct inward dialling, equivalent to AID.
TTS	Telephone translation server, used to assign an external number to a subscriber's internal number.

1.3 REFERENCE DOCUMENTS

The information in this manual refers to the following documents, available on Mitel.com:

- MiVoice 5000 Server and Mitel Gateways Operating Manual,
- Multi-site Management,
- MiVoice 5000 Manager Installation and Configuration,
- MiVoice 5000 Manager User Guide.

1.4 REMINDER CONCERNING THE LAW ON INFORMATION TECHNOLOGY

The user is reminded that the use of PBXs in the workplace must comply with the recommendations of the IT law in force.

The user's attention is also drawn to any clauses applicable in laws relating to the confidentiality of calls transmitted by means of telecommunications.

2 **GENERAL INFORMATION**

2.1 **REMINDER ABOUT OTHER MANAGEMENT MODES**

At the moment, several modes are available for processing incoming and outgoing calls:

- Digit translation
- Using the multi-directory function for subscribers.

Up to 8 Dialing plans can be defined, and previous operations are performed with regard to the definition of the plan used.

At the moment capacity limitations concern:

- The size of incoming translation tables
- The size of TTS tables
- The number of multi-directory subscribers
- The number of IIDs.

2.2 DESCRIPTION OF THE FUNCTION AND PRINCIPLE

Managing DID numbers in the LDAP directory of MiVoice 5000 Manager or MiVoice 5000 Server (as of R7.2) allows the configuration of network accesses to be centralised, by lifting the limitations in the previous paragraph.

Note: The current IID and AID numbers may be kept and carried over to SDN mode in case of switchover to this new mode for already operational sites or multi-sites.

The principle is to perform number translations for incoming and outgoing calls, using a new number translation server.

Calls coming in through this server are routed to the internal number concerned.

Calls going out through this server are transmitted with an external number for the caller's DID number.

This translation server is activated by ticking the **Search via directory** box in Menu **Telephony service>Network and links>Network>Trunk groups>Characteristics**.

Subscribers' DID numbers will no longer be stored in the iPBX but in the LDAP directory via MiVoice 5000 Manager or MiVoice 5000 as of R7.2.

In this management mode, the association of the external number (called public number) and internal number with an additional location data is implemented in the LDAP database.

With this mode, it is no longer necessary to create multi-directory subscribers for DID number management. The multi-directory function is disabled.

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IMPORTANT NOTE: Before R7.2, a MiVoice 5000 Manager was required to use this service. As of R7.2, the function is available on MiVoice 50000 for sites without a Manager.



2.2.1 WHEN TO USE THIS SERVICE?

- While resolving the incoming DID number, by reaching the internal subscriber when the relation between DID number and internal number is not explicit (case of configurations with more than 1500 internal number / DID number MCDU differences).
- While transmitting the caller ID (IID/AID) when the subscriber makes a network call without any explicit relation between the transmitted external number and an internal number (case of configurations with more than 1500 internal no./SDA no. MCDU differences).
- If it becomes necessary to use more than 16 IIDs for installation (multi-site)
- While assigning an internal subscriber one (or more) DID numbers associated with 8 plans
 proposed
- To offer the **Forced on NET** feature (for forcing an internal call when subscribers use another subscriber's DID number) without limitation due to the TTS
- To offer the vital subscriber function (in a multi-site configuration; this allows a subscriber to be reached via his/her DID number if the inter-site MOVACS link fails) without limitation due to the TTS (provided that the directory is accessible).

2.3 **GENERAL FUNCTION**

A specific processing operation is performed for each (incoming or outgoing) network call:

- **Incoming call processing** consists in making a correspondence between a call number from the trunk and the internal number to be reached.
- **Outgoing call processing** consists in sending as ID the DID number or installation number defined as additional location data (place field) in MiVoice 5000 Manager.

A number translation server is available on each iPBX (Mitel 5000 Gateways and MiVoice 5000 Server). Activation is not subject to any specific licence.

For a given iPBX, the server can be declared locally (recommended) or on another, remote iPBX.

So, for a multi-site, it is necessary to define for each iPBX, the iPBX to reach (local or remote iPBX) according to the defined priorities.

Up to 8 servers can be reached for a given iPBX.

Two LDAP directories can be reached for a given server (duplication). The first one may be internal to the iPBX, and the other one remote (or both of them can be remote).



CAUTION: For a multi-site configuration, all sites must be in the same mode with or without SDN.

Examples according to configuration

With a MiVoice 5000 Manager:

Standard LDAP directory location configuration:

- An LDAP database on MiVoice 5000 Manager,
- One replicated database on MiVoice 5000 Server.

Note: LDAP replication on Mitel 5000 Gateways depends on the size of the directory (number of records < or = 3000) and is subject to a licence.

Without MiVoice 5000 Manager:

Standard LDAP directory location configuration:

- Single site: LDAP and SDN database on the same site
- Multi-site: LDAP database on the site but SDN internally. The site may be MiVoice 5000 Server or Mitel 5000 Gateway.

Reduced directory databases

When the previous directory databases are no longer accessible, it is possible to have an internal directory database for each cluster node or for each Mitel 5000 Gateway in a multi-site configuration (called reduced database).

Reduced directory databases are not available for a Mivoice 5000 Server. The Replica function should be used.

See Section 7.6.





2.4 CALL PROCESSING

- 2.4.1 INCOMING CALLS
- 2.4.1.1 Principle

For incoming calls (on the network)

The aim is to reach the subscription when a network call is received for a given plan and for a given iPBX.

2.4.1.2 Processing an internal call meant for a DID terminal

This mechanism is based on the principle of multiple, successive translations for an incoming call.



- The relation between the external number 130964700 and internal subscriber 4000 has been made.
- Note: On a SIP trunk, translation is not necessary when the format of the number received is identical to the one contained in the LDAP database.

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2.4.1.3 Special cases

Receiving an unassigned DID call:

- If in the trunk configuration "Reject unassigned number = YES":
 - \circ The call is rejected.
- If in the trunk configuration "Reject unassigned number = NO":
 - o The call is rerouted to the attendant console declared in the trunk group...

Receiving a DID call with the LDAP server inaccessible

In this case, the call is rerouted to the attendant console associated with the trunk group.

2.4.2 PROCESSING OUTGOING CALLS

2.4.2.1 Principle

For outgoing calls (calls leaving the network)

The aim is to provide, for outgoing calls to an external network, the IID/AID numbers associated with the terminal from which the call has been made:

- The DID numbers in the caller's external Dialing plan
- Or the IID associated with the subscription, if the DID number does not exist or must not be transmitted (feature class)
- Taking into account the possible presentation restriction.

There is no menu upgrade for outgoing IID/AID processing configuration.

It is the parameter **AID SET USING DID NUMBER** * which indicates whether or not the number search is made in the directory database.

*: Menu Telephony service>Network and links >Network>AID processing,>Outgoing handling.



Note: The parameter AID completed with IID must be set to No (default value).

2.4.2.2 Outgoing call processing phases





Note: On an SIP trunk, if the DID number is a 10-digit number, there is no translation.

DIRECTLY

NONE NONE

NONE

NONE

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2.4.2.3 Special cases

Outgoing call with a subscriber configured without DID number:

ID sent = IID number associated with the subscriber's location.

Outgoing call with LDAP server inaccessible:

Outgoing ID = IID number configured in MiVoice 5000 (from the corresponding index number in Menu **Telephony service>Network and links>Network>IID handling>Outgoing handling**.

2.4.3 DIRECT TRANSLATION (FORCED ON THE LOCAL AREA NETWORK)

The aim is to force internal dialling when the number dialled by the caller (internal site or multi-site number) is a number on the installation (DID).

DID management by directory characteristics makes it possible, via new inputs in the LDP directory to make a correspondence between the dialled DID number and internal number so the call can be rerouted (internally).

Forcing is made on the iPBX by activating search by directory from Menu **Telephony service>Dialing plan>Call rerouting>Handling**.

Web Admin home	Handling call rerouting	
Subscribers	Telephony service>Dialing plan>Call rerouting>Handling (3.7.2)	
System		For direction NATIONAL
Dialing plan		For direction INTER.
Call rerouting Handling		For direction DOM
Network and links		For direction URGENCE
Reception		For direction LIA 0
Voice mail and tones		Vital extensions:
Fast links		- call rerouting after translation

The search is then run in the LDAP directory which in turn indicates the internal number of the called subscriber.

Before that, the subscriber was declared by its internal number and DID numbers for each plan (see Section 4.3).

Result modes:

DIRECT rerouting + Search via directory = **YES**

- When an external number is dialled:
 - o If a directory record is associated with the extenal number (plan function):

internal number is forced

• If there is no associated directory record:

The search is made in the MiVoice 5000 TTS tables:

- If translation is available: internal number is forced
- If translation is not available: external call is maintained

DIRECT rerouting + Search via directory = NO

• When an external number is dialled:

The search is made in the MiVoice 5000 TTS tables:

- o If translation is available: internal number is forced
- o If translation is not available: external call is maintained.

3 USING DID NUMBER MANAGEMENT MODE IN DIRECTORY CHARACTERISTICS

With MiVoice 5000 Manager, implementation may be with or without Community mode.

As of R7.2, the implementation can be done without MiVoice 5000 Manager, from the MiVoice 5000 WebAdmin.

3.1 MAIN STEPS WITH A MIVOICE 5000 MANAGER

The order of the configuration phases must be respected.

Configuring MiVoice 5000 Manager

Without Community mode: (see Section 4):

- Configure the multi-site-based telephony parameter range.
- Configure the DID number management type in directory characteristics.
- Select the DID plan number.
- Configure the prefixes for E164 dialling if this format must be taken into account (E164 numbers button). See also Section 10.1.
- Do not select Community mode.
- Configure the number blocks for multi-sites.
- Configure the installation numbers (places associated with a DID plan index).
- Generate the multi-site.
- Configure the directory connections on the multi-site sites.
- Update the numbers and places for already created subscribers (general-purpose subscribers, etc.).

In Community mode (see Section 5):

- Configure the multi-site-based telephony parameter range.
- Configure the DID number management type in directory characteristics.
- Select the DID plan number.
- Check the **Extended Dialling Plan** box if dialling is > 6 digits.
- Configure the prefixes for E164 dialling if this format must be taken into account (E164 numbers button). See also Section 10.1.
- Activate Community mode
- Define commuities.
- Assign Community right to operators.
- Assign Communities to sites.
- Configure numbering ranges.
- Configure installation numbers.
- Generate the multi-site.
- Configure the directory connections on the multi-site sites.
- Update the numbers and places for already created subscribers (general-purpose subscribers, etc.).

Configuring iPBXs (the same in both modes). Refer to Section 7.

- Activate SDN mode.
- Configure the LDAP database connections.
- Configure the number translation service.
- Configure the number translators and attendant console (if necessary).

3.2 MAIN STEPS WITHOUT MIVOICE 5000 MANAGER

The order of the configuration phases must be respected.

In manual or mass creation mode (see Section 6.3):

- Creating locations. Locations are created in the Corporate branch of the LDAP database.
- **Creating external number ranges** to allow DID numbers to be assigned automatically when subscribers are created. DID numbers are entered in the Subscriber records in the LDAP database. See Section 6.4.
- **Configuring/managing subscribers** in this mode (see Section 6.6):
 - Assigning locations to subscribers during creation or modification. Locations are entered in the Subscriber records in the LDAP database.
- **Answering service** to define the call numbers of attendants and answering services in particular. (See Section 7.5).

Migrating subscriptions to DID number management mode via SDN (see Section 6.2)

When DID number management via SDN is enabled, a subscriber migration procedure is proposed to update the LDAP database. Some steps will be taken automatically. Migration is available when upgrading to a software release with this mode.

Configuring the iPBXs (see details in Section 7: common to all modes with or without Manager)

- Configure the LDAP database connections.
- Configure the number translation service.
- Configure the number translators and attendant console (if necessary).

4 CONFIGURING MIVOICE 5000 MANAGER WITHOUT COMMUNITY MODE

The procedure is described from the example below:



Menu Administration>Configuration, Range tab

- Tick the Based on multi-site checkbox for the telephony paramter range.
- Click Apply.
- Select the multisite in Menu Administration>Topology.
- Click Configuration.

In the Type of DID number management area:

- Tick the In directory characteristics checkbox.
- Select the **DID plan number** (the main DID plan number is the one used by MiVoice 5000 Manager for the public number (see Section 4.3).
- Check the **Extended dialling plan** box if dialling is > 6 digits.
- Configure the prefixes for E164 dialling if this format must be taken into account (E164 numbers button). Refer also to Section 10.1
- Note: Do not tick the Community mode box.

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• Click Apply.

Wetwork topology Multiseite configuration Name Multiseite configuration Name Multiseite configuration Directory	Administration					
Multisite configuration Name Multisite 1 Reference site To import a new site into the multisite Directory	Network topology					
Name Reference site Directory Objectory Voice mails Management type of DID numbers In the technical characteristics Number of DID plan Plan 1 E164 numbers Community mode Encryption in the multisite Certificate import	Multisite configuration					
Voice mails TWP Servers Identify the sites Generate WebRTC Community Default user password SIP password generation at the creation. Management type of DID numbers In the technical characteristics In the directory characteristics	Name Multisite1	Reference site ACS_Cluster1 AXD1	To import a new site into the Site :	multisite	Import	
Generate WebRTC Community WebRTC Url Security In the security Default user password Is IP password generation at the creation. Management type of DID numbers In the technical characteristics In the directory characteristics Number of DID plan In the directory characteristics Number of DID plan E164 numbers E164 numbers Image: TMA in community mode Image: TMA in community mode Encryption in the multisite Encryption Encryption Certificate import	TWP Servers Identify the sites		Sending Email to user Activate De-activate			
Default user password Image Step password generation at the creation. Management type of DID numbers Image Step password generation at the creation. Image In the directory characteristics Number of DID plan Image In the directory characteristics Number of DID plan Image In the directory characteristics Number of DID plan Image Intervention E164 numbers Image Intervention Image Intervention Image Interventinteristics Image Intervention<	Generate Community Security		WebRTC WebRTC Url			
Management type of DID numbers In the technical characteristics In the directory characteristics Number of DID plan Interview Community mode TMA in community mode Encryption in the multisite Certificate import	Default user password		SIP password generation	on at the creation.		
Community mode TMA in community mode Encryption in the multisite Certificate import	Management type of DID numbers In the technical characteristics In the directory characteristics	Ν	lumber of DID plan	Plan 1		
Encryption in the multisite Encryption Certificate import		E	Community mode			
Encryption Certificate import	Encryption in the multisite					
	Encryption	Certificat	e împort			

4.1 CONFIGURING NUMBERING RANGES

Menu Telephony>Dialing plan>Numbering range

The numbering ranges are configured through an import/export operation.

Import is always global.

To add a numbering range, the administrator exports the current configuration and adds the new ranges to the file before re-exporting it.

Description of the different fields:

- Range name,
- **Type**: 0:Internal, 1:PSTN, 3: Internal and PSTN: shows the type of range
- internal num. start: Shows the first number of the internal range
- internal num. end: Contains the last number of the internal range

The **DID Planx start** and **DID Planx end** columns contain the first and last DID numbers for the eight plans.

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

- Site: name of the site on which the number range is declared.
- Site: name of the other sites on which this same number range is declared.

MANAGING DID NUMBERS



#Range name	Type : 0:Local,	Local num star	Local num enc	DID Plan1 star	DID Plan 1 end	DID Plan2 star	DID Plan 2 end	Site name	Site name
PSTN Local1	3	7000	7999	130457000	130457999			Cluster1	
Local1	0	5000	5999					Cluster1	
PSTN Local3	3	2000	2500	130962000	130962500			Cluster1	
SIP trunk TL	1					4000	4500	Cluster1	

For the first configuration, click **Export** to retrieve the file frame and, thus, fill it in and then import it again.

For future management:

- Export the file.
- Update it.
- Import it again.

4.2 MANAGING INSTALLATION NUMBERS

Menu Telephony>Dialing plan>Installation numbers.

4.2.1 MASSIVE MANAGEMENT

The installation numbers are configured through an import/export operation.

For the first configuration, click **Export** to retrieve the file frame and, thus, fill it in and then import it.

The import/export file is used to fill in the different places (IID):

- **#index**: alphanumeric indexation value for the place label. This is the value taken into account in the directory characteristics "**placeindex**".
- **Place**: explicit description of the site (corresponding to a geographic location, for example)
- PlanX IID: DID numbers of each place on the plan in question (8 plans maximum)

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

• C. DIST. X. DID corporate numbers of each place on the plan in question (8 plans maximum).

The index value is used to define a place name. This place name will be taken into account in the subscriber's directory record.

An index value corresponds solely to one and only one place.

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Note: If the place name is modified, the index retains its initial value.

🔇 Mitel - MiVoice 5000 Manager Client	t - Tele	epho	ny	and the	-									-							×
	諙	Nur	nbering	plan																	
🕅 Mitel	0	Inst	allation nu	mbers																	
	Regi	ion :	"Region1	" - Multisi	ite : "Multisi	te" - Site : ""	5														
🙀 User: M7450	¥ C Ind	hange	e Regions/Si Commun	tes De	efault	IID plan 1	IID pla	11	IID p	IID p	IID p	IID p	IID pl	Call dist							
Numbering plan	Stat	Si	OUEST		V	0130962000								2000							
Number blocks	Stat	Si	OUEST			0130962700								2700							
A Installation numbers	Stat	Si	EST		V V	0130457000		\vdash						2300							
🕝 Technical characteri								<u>si - s</u>													
Directory managem																					
🖗 Subscribers manage																					
Consultations																					
🚰 Terminals managem																					
T Mitel applications																					
						_					-		-	-	_	-	-	_			
		Ad	d	Modify	Delete					*									Import	Ex	port

Search field on the different items of the column.

#Place file																	
#index	location	DID Plan1	DID	CallDist. 1	Cal	Cal	Cal	Cal	Cal	CallDist. 7	CallDist. 8						
Station1	Site 1 Bordea	130962000								2000							
Station2	Site 2 Paris	130962501								2501							
Station3	Site 3 Reims	130457000								7000							
For future management:																	

For future management:

- Export the file
- Update the file
- Import the file again.

4.2.2 INDIVIDUAL CREATION AND MODIFICATION

To add an installation number, click **Add** then enter the parameters for this number (Index, place, plan , IID, Call distribution number).



Note: Call distribution number= DID corporate number (declared in the 'iPBX).

To modify this installation number:

- Select the line concerned.
- Click **Modify** and enter the new parameters for this number (index, place, plan IID, call distribution number).

4.3 **GENERATION**

This phase is necessary for updating the MiVoice 5000 Manager database.

- Select the multisite in Menu Administration>Topology.
- Click Configuration.
- Click Generation.
- Click OK.
- Click Next or Import if the directory files must be imported again.
- Click Read.
- Click Next.
- Wait for the site to be generated.
- Click Finish.

4.4 **CONFIGURING THE DIRECTORY CONNECTION FOR SITES**

During a first installation, it is important to define the directory database(s) on each multi-site site:

Menu Telephony service>Subscribers>Directory>Parameters>Connections - Configuration tab.

🕅 Mitel 🕴 Te	elephony service		Guyancourt	۹	
Web Admin home Subscribers Directory Settings Connections System Dialing plan Network and links Reception Voice mail and tones Fast links	Directory connections settings Telephony service-Subscribers-Directory- Configuration Name resolut Directory configuration base EXP Type of server Name of server or IP address : Port Base or URL : Login Password Max number of answers by reque: Regeneration of internal records Beduced directory	Settings-Connections (1.1.1) ion Dialing service EXTERN. 127.0.0.1 389 ou=local,o=AASTRA,dc=DOMAIN,dc=com cn=Manager,dc=DOMAIN,dc=com it 50	÷ D. V	ふ ■、 4 日 日 日 日 日	
	Reduced directory				

For more information, see Section 7.2.

4.5 MANAGING PLACE AND DID NUMBERS FOR SUBSCRIBERS

4.5.1 MASSIVE CREATION

For a new configuration, use the massive creation form, from **Telephony>Subscriber** management>Massive creation – Massive creation tab.

Mitel - MiVoice 5000 Manager Clien	it - Telephony		
	🖲 Subscribers management		
🕅 Mitel	Mass creation		
	Region : "Region1" - Multisite : "Multisite1" - Site	:""	
	Change Regions/Sites		
💘 User: M7450	Region Multisite/Standalone site		Quick search
Numbering plan	Region 1 Multisite 1		
Technical characteri			
Directory managem			
🞘 Subscribers manage			
d Research			
A Unitary creation	Region 1 Multisite 1		
Mass creation	Mass creation Directory mass modification Us	ser Portal modification Profiles Set authentication	
👼 Mass treatment foll	Prepare the mass programmation of subscribers	Prepare the mass programmation of external records	Prepare the mass programmation of alias records
👩 Web Client	Generate an Excel template for mass programmation New	Generate an Excel template	Generate an Excel template
🎓 Profiles management		New	New
Consultations	ACS_Cluster I		
Ja Terminals managem	_ Import		
Mitel applications	Import data	External server(s)	
g mile applications	Import data from Excel	🧼 Import data from data	
	Import	provisionning tool	
		UCP	
		TWP	

Massive creation is site-based and is performed through import/export.

- Select the site.
- Click New in the Export field to export the file to configure.
- Then fill in the different tabs.

In the **DIRECTORY** tab.

The **Place** column is used to assign a geographic location to each user.

The place combo box corresponds to the configuration made in the previous phases.

Name	Firstname	Phone number	Place	Hierarchy	Gender	Function	Adress
Dupont	Eric	7000	Site 2 Paris	STE 0/SERV 0			
Durant	Paul	2000	Site 1 Bordeaux	STE 0/SERV 0			
Lift1		5000	Site 2 paris	STE 0/SERV 0			
Lift2		5001	Site 1 Bordeaux	STE 0/SERV 0			
Dudu	Franck	7001	Site 3 reims	STE 0/SERV 0			

In the TECHNICAL tab

Nom	Prénom	Numéro	Place	Plan 1	Plan 2	Plan 3	Plan 4	Plan (Plan 7	Plan 8	eur IMAP	GIC n°1	Facilité
Dupont	Eric	7000	Site 2 Paris	0130457000	4000							STE 0\SERV 0	
Durant	Paul	2000	Site 1 Bordeaux	0130962000	4001							STE 0\SERV 0	
Assenceur 1	0	5000	Site 2 Paris									STE 0\SERV 0	
Assenceur 2	0	5001	Site 1 Bordeaux									STE 0\SERV 0	
Dudu	Franck	7001	Site 3 Reims	0130457001	4002							STE 0\SERV 0	

• Click Import in the Import area to import the configured file again.

Then configure the sites on the iPBX site as indicated in Chapter 6.

4.5.2 MASSIVE DIRECTORY MODIFICATION

Massive directory configuration can be made from Menu **Telephony>Subscriber management** >Massive creation – Massive directory modification tab.

- Click **Numbers** (**Export area**) to export the directory.
- Make the modifications in this file.
- Then click **Numbers** in the **Import** area. The file is taken into account to update the directory characteristics in the LDAP database.

In the example:

🔇 Mitel - MiVoice 5000 Manager Clier	nt - Telephony				-					
	🖲 Subscribers mana	gement								
🕅 Mitel	Mass creation									
	Region : "Region1" - Multisite : "Multisite1" - Site : ""									
	Change Regions/Sites									
💘 User: M7450	Region	Multisite/Standalone site			Quick search		Ť.			
Numbering plan	Region1	Multisite1					-			
🕜 Technical characteri										
Directory managem										
🖲 Subscribers manage										
d Research	Region1	Multiste 1								
👔 Unitary creation	Indgionn									
Mass creation	Mass creation Director	y mass modification User	Portal modification Profile	s Set authentication	_					
Mass treatment foll	Export	Subscribers	Import		Subscribers					
🖕 Web Client	To generate an excel fo (CSV) for the directory modification	nass Contacts	To import an ex for the directory modification	mass	Contacts					
Profiles management		Numbers		\sim	Numbers					
	[
	Pictures management				<u> </u>					
de Terminals managem	Pictures import from a .zip file	Import		/						
	Listing of the pictures	Listing								
	Richard deletion	Deleter								
	Fictures deletion	Deleton								
	\									
			/							
cleUid phone	NumbplaceInde	x didPlan1	didPla didPla	didPla didPla	didPla didPla	a didPla pr	ivate			
ABO 7995 00 5995						LV				

cleUid	phoneNumb	placeIndex	didPlan1	di	dPla	didPla	didPla	didPla	didPla	didPla	didPla	private
ABO 7995 00	5995					/						LV
DupontEric0	7000	Station2	013045700	0 40)00/							LV
DurantPaul0	2000	Station1	013096200	0 40)Ó1							LV
Assenceur 1	5000	Station2										LV
Assenceur 2	5001	Station1										LV
DuduFranck(7001	Station3	013045700	1 40	02							LV

2

Note: Wait for the report in the Telephony End of Import log bar before management.

4.5.3 INDIVIDUAL CREATION OR MODIFICATION

For creations or modifications which do not require the use of massive creation files, place numbers and DID numbers are managed for subscribers from the technical record (menu **Telephony>Subscriber management)**:

- Select the subscriber in question.
- Choose the place. The choice is made from a list, defined previously via the **place** field.
- Enter the DID numbers (or public number) for each plan in question.

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

😁 Mitel - MiVoice 5000 Manager Client				
User: M7450	Phone number	∆ Community	V	Allocations
- Q Durant Paul		Region1 / Multisite1 / Cluster1		
e bulance dur			<u>a</u> .	
	Extensions			
	Local number Short number	X Label	Location	
	Add symbols	Confidentiality Group Better	CIDUID	
	Add number Add short	Conidentiality Second as •	SIFURI	
	Plans			
	Plan 1 number 130962000 R Plan 2 num	ber Plan 3 number	Rian 4 number	*
	Plan 5 number 🗱 Plan 6 num	ber 😫 Plan 7 number	Plan 8 number	
	Add compl. Total Reinit.			
	Characteristics fields			
	Features	Tech. hierarchy	Boss line	
	Day PSTN	Bearer service	Site	
		Speech	Cluster	
	Night PSTN .	Predefined forward	Node	2
	Day TI	Hotline type	Number	
				and the second se
	Night TL .	Hotline day number	Usable in calls waiting queue	
		Hotline night number	User supervision (tickets)	
		Forwarding group 1	Service class	
		Forwarding group 2	Association allowed	
				-
🕑 User Portal				
Historic	Print		Previous	Finish Cancel Next
a mistoric				

• Then validate the creation or modification of the subscription.

5 CONFIGURING MIVOICE 5000 MANAGER WITH COMMUNITY MODE

5.1 INTRODUCTION

Community mode is basically used to:

- Limit the perimeter of MiVoice 5000 Manager operators to a subgroup of subscribers defined on the same site.
- Facilitate the choice of subscriber number during creation, by filtering the corresponding number ranges.
- Facilitate the configuration of the backup site (dual homing).
- Facilitate the choice of hardware resources for analogue and digital subscribers.

Community mode is used to define a group of Communities in which one or more number ranges are defined.

Each community can, for instance, be linked with a geographic location.

The Community is assigned to systems (cluster server, node, remote site) which share the same numbering range.

Community mode is configured on a multi-site basis.

Community management is an option available only in the DID number configuration, in directory characteristics (**SDN mode**).

Community mode is available as of MiVoice 5000 Manager 3.1.

Community configuration is available for all iPBX releases.

Place and Community

The parameter **Place** is used, in particular, to define the IID number.

A place may be defined in only one Community.

Several places may be defined in the same Community.

Rules for assigning Communities to sites

Depending on the type of site, the rules concerning the assignment of Communities are:

- Several Communities may be assigned to the Cluster Server or to sites in the multi-site configuration.
- The Cluster Server also inherits the Communities assigned to Cluster Nodes.
- Only one community may be assigned to the nodes of a cluster server.

Community and external directory synchronisation

If synchronisation with an external directory must be implemented in profile mode, it is necessary to define a specific attribute in the configuration file of the required directory connector in order to characterise the Community.

This attribute is linked to the name of the community or to one of its aliases.

Several values in AD may correspond to the same Community. In this case, several aliases may be defined.

Example

Here is an example of how to implement this mode:



5.2 ACTIVATING COMMUNITY MODE

Menu Administration>Configuration, Range tab

- Tick the Multi-site basis checkbox.
- Click Apply.
- Select the multisite in Menu Administration>Topology.
- Click Configuration.

In the Type of DID number management area:

- Tick the In directory characteristics checkbox.
- Select the **DID plan number**.
- Configure the prefixes for E164 dialling if this format must be taken into account (E164 numbers button). Refer also to Section 10.1
- Tick the **Community mode** box to activate the mode in the multi-site configuration.

🔇 Mitel - MiVoice 5000 Manager Client	-		
🕅 Mitel	Administration Network topology Multisite configuration		
 User: M7450 Immediate Actions Deferred Actions Campaigns Administration Configuration Configuration Configuration 	Name Multisite1 Reference site Directory Voice mails TWP Servers Identify the sites Generate Community	To import a new site into the multisite Site : Import Sending Email to user Activate De-activate WebRTC WebRTC Url	
 Actions in progress Network topology Site identification Sites List Management Unlock functions Preferences Consultations Telephony Network Status map 	Security Default user password Management type of DID numbers In the technical characteristics In the directory characteristics Encryption in the multisite C Encryption	SIP pessword generation at the creation. Number of DID plan Plan 1 Image: Community mode E164 numbers Image: Certificate import Certificate import	
		Back	Delete

- Click Apply
- Click Community
- ٠
- to display the Community configuration screen.
- Refer to Section 0.

5.3 MANAGING COMMUNITIES

Communities are always defined from the multi-site, in Menu Administration>Topology.

A Community is defined by key and a label, and possibly one or more aliases.

Possible actions on Communities are:

- Add Community.
- Modify Community (only for the label and alias).
- Delete Community.
- Export the parameters of configured Communities to a .csv file.
- Import a .csv file: this import only adds or modifies a Community. Deletions can only be made through an individual action in the MiVoice 5000 Manager Community management menu.

5.3.1 INDIVIDUAL MANAGEMENT

5.3.1.1 Adding a Community

From the multi-site, in Menu Administration>Topology

- Select the multi-site.
- Click Configuration.
- Click Community.

	Administration		
🕅 Mitel	Network topology		
	Communities list		
User: M7450	communaute 2 Add		
Immediate Actions	communaute all Delete		
Deferred Actions	Export		
Campaigns	Partial import		
Administration	Characteristics		
Configuration	External synchronisation alia	15	
operator management	Key cont	Add	
	Label communaute 1		
L Network topology	Contrainado 1	Modify	
Site identification		Delete	
Sites List Management			
Unlock functions			
Preferences	Sites using the community		
Consultations	Site Default backup site		
T elephony			
Network Status map			
			Back Apply
	Operation's log		
		Vser V	Comment I

Enter the Community parameters in the different fields below:

• Key: string of 20 alphanumeric characters without accent and '=' (maximum). The key must be unique in the multi-site and non-modifiable.

- Label: string of 50 alphanumeric characters maximum, (with accent and '.', '-', _', ''). The label must be unique in the multi-site.
- Alias (optional): field used for synchronisation with a remote directory database. 20 values may be defined.

For the alias:

- Fill in Field 1 then click Add.
- If other Aliases must be defined, restart the operation.

After filling in the fields, click **Apply**.

Restart this phase for the other Communities.

Example:

In the reference example, 3 Communities have beeen created.

O Network to	pology		
CENTRE EST		Add	
OUEST		Delete	
		Export	
		Partial import	
Characteristics			
		External synchronisation alias	
Кеу	COM2	CENTRE_2	Add
Label	CENTRE		Modify
			Delete
			CENTRE_1

5.3.1.2 Modifying a Community

In the same menu as the previous one:

Only the label and alias may be modified (the key cannot be modified):

Select the Community concerned from the list.

- Modify the label.
- Click Modify then Apply.

For the alias, proceed in the same way by selecting the alias concerned.

5.3.1.3 Deleting a Community

In the same menu as the previous one:

Deletion can only be made on one Community at a time.

Deletion is not authorised if the Community is used in a subscription.
Select the Community to delete.

The ranges and places to be deleted are displayed.

- Click **Delete**.
- The List of communities screen is displayed, with the updated list.

After the deletion, the topology and operator rights are also updated.

5.3.2 MASSIVE COMMUNITY MANAGEMENT

5.3.2.1 Massive creation



CAUTION: When Communities are massively created for the first time, it is necessary to define the rights in this mode for the operators in the perimeter concerning them, including for the operator who carried out the import. See Section 5.5.

From the multi-site, in Menu Administration>Topology

- Select the multi-site.
- Click Configuration.
- Click Community.
- For the first configuration, click **Export** to retrieve the file frame and, thus, fill it in and then **partially import** it again.

Import/export file format

The import file is an .csv type file and contains the following fields:

Key: Community key

Label: Community label

Following Alias columns: Alias for external synchronisation (10 aliases maximum)

#Clé	Label	Alias1	Alias2	
COM2	CENTRE	CENTRE_1	CENTRE_2	
COM3	EST	EST_1	EST_2	
COM1	OUEST	OUEST_1	OUEST_2	



IMPORTANT NOTE: After a massive Community creation or modification, it is necessary to restore the Client's session (login and logout).

5.4 MASSIVE MODIFICATION

Massive Community modification is used to:

- Add some Communities
- Modify the label of existing Communities
- Add some aliases
- Modify existing aliases.

Keys and Communities cannot be deleted through massive action.

From the multi-site, in Menu Administration>Topology

- Select the multi-site.
- Click **Configuration**.
- Click Community.
- Click **Export** to retrieve the file in progress.
- Enter and import this file again through **Partial import**.

5.5 DEFINING OPERATORS' PERIMETER FOR THE COMMUNITY RIGHT

Menu Administration>Operators management- Community rights.

The definition of rights is operator-based.

• Select the operator from the list.

Operator mana	agement						
Operators list							
Search		%					
Name 🔺	First name	Login 🛆	Rights		▼ E-mail		Add
admin	admin	M7450	Admin				Delete
							Print
							Export
							Import
							Groups
							Profiles
Identify Characte	ristics	Rights					See operators who are
Name	admin	Geograph	ical Rights	lierarchical Rights	Communities Rights		<u>present</u>
First name	admin	Functional	Rights Ad	min	•		
Login	M7450	_					
E-mail	[Management b	/ group				
		Group cho	ce		*		
						Cancel	Apply

In the reference example, Operator 2 manages communities COM1 (WEST) and COM2 (CENTRE).

• Click Community rights.

By default, during a first massive creation, the rights are not assigned, no matter the Community. No box is ticked.



Remarks about ergonomics

If the topmost box on the general tree is ticked, the rights are assigned to all the communities for the operator concerned (in the example Region 1).

If the topmost box on the multi-site tree is ticked, the rights are assigned to all the communities of this multi-site for the operator concerned (in the example Multi-site 1).

If the operator in question only has rights on one or more communities, tick the corresponding boxes.

In the example below, the CENTRE and WEST boxes are ticked, assigning the rights to Operator 2.

Communities Rights	
E- ☐- Multisite I CENTRE	
Deselect all	To reduce Cancel Apply

• Click Apply.

Define the rights for the next operators in the same way.

Then click **Apply** on the operator management screen to validate the assigned rights.

Operator mana	agement				
rators list					
Name	First name	Login	Rights V Groups	E-mail	
in	admin	M7450 Admin	nights of croops		 Add
					 Dele
					Prin
					Exp
					Imp
					Grou
					Profile
Identify Characte	ristics	Rights		\backslash	See oper who a
Name	admin	Geographical Ri	ights Hierarchical Rights	Compunities Rights	prese
First name	admin	Functional Rights	Admin	-	
Login	M7450				
Login E-mail	M7450	Management by group)	·	
Login E-mail	M7450	Management by group Group choice	2		
Login E-mail	M7450	Management by group Group choice			
Login E-mail	M7450	Management by group Group choice			

• Then resume the procedure (assigning communities to sites).

5.6 ASSIGNING COMMUNITIES TO SITES

Once created, Communities must be assigned to the multi-site sites.

Only one default backup site can be defined per community.

Depending on the type:

Cluster Server:

- Several Communities may be assigned to it.
- The Cluster Server also inherits the Communities assigned to the nodes of this same cluster.

Node: only one Community may be assigned to it.

Multi-site site: several Communities may be assigned to it.

Procedure:

Menu Administration>Topology

- Select the site (cluster server, node or standalone site)
- Click Configuration.

In the Miscellaneous parameters - Community area:

- Select the Community concerned from the list.
- Click on =>.

The list on the right is filled in.

Define whether the current site is the default backup site for the community.

• Click Modify.

In the example, the "cluster" is assigned to "Community 3" and "Community all" while "noeudacs" is assigned to "Community 3".

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New Low Days Composition draw I Days Server Image: Im	enter a		and and and a		and the		a second
Alane () Dever Server Alane () Dever Server Serversti File Server () Dever Server File Server () Dever Server File Server () Dever Server File Server () Dever Server File Server () Dever Server Server () Dever Server File Server () Dever Server Server () Dever () Dever Server Server () Dever ()	lame:	lectuster	Dongis:	0303012009FADD	1		
	elesse:	76.1	Cluster Serve	N.		IPEX Service User	Foral
annual production of the first strength of t		-			-10	CAcavate	
Contents	corress:					🖗 De-activate	
Politica C C C C C C C C C C C C C C C C C C C	ornector						
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	-						
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	Niccellaneous set Composed mine IP address or to Community	ings Icphone network (Hostname	10,146.66.83			
	Niccellaneous set Encrypted eite IP address or to Community	lephone network (comunade)	Mostname	10.146.66.20	mmenty	Default ba	ckup site
	Niccellaneous set Cronysted rite Or address or to Community	tephone network 1 comunade 1 comunade 2	Mostname	10.148.66.30	comunity de 3	Detauk be	ciup site
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1000 100	Miccellaneous set Encrypted rife 29 address or to Community	inge Isphone network i comunate 1 comunate 2	Mastname	10.148.66.30	romundy to 3 to al	Detsuit be	ckup site
Marriery Date Telefy Date Cancel wear in tag (marrier) (marrier) (marrier) (marrier) (marrier) (marrier) (105) (marrier) (marrier) (marrier) (marrier) (marrier)	Niccellaneux set Crossed rite Ø address or to Community	inge Iephone network i communade 2		10.146.66.80	romundy to 3 to al	Default be	ckup site
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Model Date Model Date Carear entrol r/s top of part of poly of poly parts	Niscellaneous set	ings Isphone network (Communade 2	masoname	10.146.66.33	rsmundy te 3 te al	Detsue be-	ckup site
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entron's log 20 (2014) 図 (2015) 図 (2015) (Niscellaneous set Encrypted site IP address or to Community	ings tophone network (communate)	Masthame	10.146.66.83	romunity to 3 to all Modify	Defaut be	ckup site
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	Harrison	The support			12.
Name:	noeudaca	Dangle:	03FF0103157075	Node number	4
Release:	796.1	Node	Survival node		
Address:				1	
Connection					
IP address	10.148.66.62				
IPEX password					
MMI		(2)(2)			
and the second second second second					
Miscellaneous set	ings				
Miscellaneous set Encrypted site IP address or te	ings lephone network f	lostneme	10.148.65.62		
Niscellaneous set Encrypted site IP address or tel Community	ings lephone network f	fostname	10.148.55.62	mmunity	Default backup si
Miscellaneous set Encrypted site IP address or tel Community	lephone network f communaute 1 communaute 2	tostname	10.148.55.62	mmunity de 3	Default backup si
Miscellaneous set Encrysted site IP address or tel Community	lephone network h communaute 1 communaute 2 communaute 2	lostname	10 148 66 62	mmunity de 3	Default beckup at

5.7 CONFIGURING NUMBERING RANGES

MenuTelephony>Dialing plan>Numbering range

The numbering ranges are configured through an import/export operation.

The difference compared to the mode without Community:

- The sites are no longer to be entered in the .csv file (the association numbering range <=> site is made via the Communities associated with the site).
- Addition of the Community key
- Addition of the a default range for each Community to be defined by the administrator.

Import is always global.

To add a numbering range, the administrator exports the current configuration and adds the new ranges to the file before re-exporting it.

Description of the different fields:

#Community key: contains the Community key. If this column is empty, this means that the numbering range is available for all the Communities. This number numbering range must be internal.

Default community (yes => 1/ no => 0): a default range must be defined for each Community. This parameter is only used for external directory synchronisation in Quick create mode.

This configuration must be made for each range:

- 0 or empty: no default range
- 1: default range (the first range with "1" is the default range for each Community.

Range name: Range name

Type: 0:Internal, 1:PSTN, 3:internal and PSTN: shows the type of range:

- internal num. start: indicates the first number of the internal range (only for range type 0 or 3).
- internal num. end: contains the last number of the internal range (only for range type 1 or 3).

The following columns contain the first and last DID number for the eight plans.

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

#Community key	default com	r Range name	Type : 0:Loca	Local num.st	Local num er	DID Plan1 sta	DID Plan 1 ei	DID Plan2 sta	DID Plan 2 er	DID Plan3 st	DID Plan 3 er	r DID Pl
	1	Local1	0	5000	5999							
COM1	0	PSTN Local3	3	2000	2200	130962000	130962200					
COM1	0	PSTN Local2	3	2700	2999	130962700	130962999					
COM2	0	PSTN Local1	3	7000	7999	130457000	130457999					
COM2	0	SIP trunk TL	1					4000	4500			
COM3	0	PSTN Local4	3	2300	2500	130972300	130972500					

In the example: The range Internal1 (5000 to 5999) is valid for all the Communities and devices.

	_					
	in Da	iy(s)				
5	-	-				Configure
						Configure
	1	1	1	1	C	1
efault	Site 4	Туре	Local number	Plans	Name	External number
V	Cluster	Local	5000 - 5999		Local1	
V	Cluster	Local	5000 - 5999		Local1	
	Cluster	Local-DID	2300 - 2500	Plan 1	RTC Local4	0130972300-0130972
	Cluster	Local-DID	2000 - 2200	Plan 1	RTC Local3	0130962000-0130962
	Cluster	Local-DID	2700 - 2999	Plan 1	RTC Local2	0130962700-0130962
	Noeud1	Local-DID	7000 - 7999	Plan 1	RTC Local1	0130457000-0130457
V	Noeud1	Local	5000 - 5999		Local1	
	Noeud1	PSTN		Plan 2	LIA Trunk SIP	4000-4500
	efault	efault Site A V Cluster Cluster Cluster Cluster Cluster Cluster Noeud1 V Noeud1	in Day(s) efault Site A Type V Cluster Local Cluster Local Cluster Local-DID Cluster Local-DID Cluster Local-DID Noeud1 Local-DID Noeud1 Local Neaud1 ESTN	in Day(s) efault Site △ Type Local number ♥ Cluster Local 5000 - 5999 ♥ Cluster Local 5000 - 5999 ● Cluster Local 5000 - 2500 □ Cluster Local-DID 2300 - 2500 □ Cluster Local-DID 2000 - 2200 □ Cluster Local-DID 2700 - 2999 □ Noeud1 Local 5000 - 5999 ♥ Noeud1 Local 5000 - 5999	in Day(s) In Day(s) efault Site Type Local number Plans Image: Cluster Local 5000 - 5999 Image: Cluster Plans Image: Cluster Local 5000 - 5999 Image: Cluster Local S000 - 5999 Image: Cluster Local - DID 2300 - 2500 Plan 1 Image: Cluster Local-DID 2000 - 2200 Plan 1 Image: Cluster Local-DID 2700 - 2999 Plan 1 Image: Cluster Local-DID 7000 - 7999 Plan 1 Image: Cluster Local 5000 - 5999 Plan 1 Image: Cluster Image: Cluster Image: Cluster Plan 1 Image: Cluster Image	in Day(s) In Day(s) efault Site Type Local number Plans Name Image: Cluster Local 5000 - 5999 Local 1 Local 1 Image: Cluster Local 5000 - 5999 Local 1 Local 1 Image: Cluster Local 5000 - 5999 Local 1 Local 1 Image: Cluster Local 2 5000 - 5999 Plan 1 RTC Local 4 Image: Cluster Local-DID 2000 - 2200 Plan 1 RTC Local 3 Image: Cluster Local-DID 2700 - 2999 Plan 1 RTC Local 2 Image: Cluster Local-DID 2700 - 7999 Plan 1 RTC Local 1 Image: Cluster Local - DID 7000 - 7999 Plan 1 RTC Local 1 Image: Cluster Local - DID 7000 - 5999 Plan 1 RTC Local 1 Image: Cluster Local - DID 7000 - 5999 Plan 1 RTC Local 1 Image: Cluster Local - DID 5000 - 5999 Local 1 Local 1

Note: The internal numbers configured with some external DID numbers must be unique in the numbering range configuration of a multi-site.

Example:

2

If the administrator declares range 2000 - 2500 as internal numbers, with 0130962000-0130962500 as DID numbers, numbers 2000-2099 cannot be declared in another range.

An internal numbering range without DID number may be associated with all the Communities or with only one Community (common range).

5.8 **CONFIGURING INSTALLATION NUMBERS**

Menu Telephony>Dialing plan>Installation numbers

5.8.1 MASSIVE CREATION

The installation numbers are configured through an import/export operation.

The difference compared to the SDN mode without Community:

- Addition of the Community key
- Addition of the notion of default place. This parameter is only used for external directory synchronisation and Quick create, but is mandatory.

The parameter **Place** is used, in particular, to define the IID number.

A place may be defined in only one Community.

Several places may be defined in the same Community.

Description of the different fields:

- Community key: contains the Community key.
- **Default place:** defines a default place for each Community. The configuration must be made for each place. A default place must be defined for each Community.
- **#index**: alphanumeric indexation value for the place label. This is the value taken into account in the directory characteristics "**placeindex**".
- **Place**: place label (corresponding to a geographic location, for example)
- PlanX IID: DID numbers of each place on the plan in question (8 plans maximum).

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

• C. DIST. X. DID corporate numbers of each place on the plan in question (8 plans maximum).

An index value corresponds solely to one and only one place.

The index number is used to define a place name. This place name will be taken into account in the subscriber's directory record.

Note: If the place name is modified, the index retains its initial value.

#Place file												
#Clé de la comm	faut (oui =>	index	place	NDI Plan1	NDI PI	NDI P	I NC	NE N	C N C	NDI PI	Accueil 1	Accueil 2
COM1	1	Station1	Site 1 Bordeaux	0130962000							2000	
COM1	0	Station1A	Site 2 Nantes	0130962700							2700	
COM2	1	Station2	Site 2 Paris	0130457000							7000	
СОМЗ	1	Station3	Site 3 Reims	0130972300							2300	

Installation numbers

2

Region :	on : "Region1" - Multisite : "Multisite" - Site : "Cluster"																		
* Change	Regions/Site	:5																	
Index	Location	Community	Default	IID plan 1	IID plan	I	IID pl	II	II	II	IID p	Call distributi	Call dis						
Station1	Site 1 Bor	OUEST	V	0130962000								2000							
Station1	Site 2 Nan	OUEST		0130962700		= (_		-		2700							
Station2	Site 2 Pari	CENTRE	V	0130457000				-	_	—		7000							
Station3	Site 3 Rei	EST	V	0130972300								2300							

Note: The boxes ticked in the Default column correspond to the places defined by default for each Community.

5.8.2 MASSIVE MODIFICATION

The same procedure for massive creation, through Import/Export.

MANAGING DID NUMBERS

5.8.3 MANAGING INSTALLATION NUMBERS INDIVIDUALLY

Installation numbers can also be managed individually using the Add, Modify, and Delete buttons.

🕄 Mitel - MiVoice 5000 Manager Clien	t - Telephor	ny											-								X
	12 Nur	nbering p	olan																		
🕅 Mitel	() Insta	allation nu	nbers																		
	Region :	"Region1'	- Multisite : "	Multisite" -	Site : "Cluster	."															
Heart M74E0	* Change	e Regions/Site	BS			_															
Coser: M7450	Index	Location	Community	Default	IID plan 1	IID plan	Ī	IID pl	II	II	II II	D p	Call distribut	i Call	dis C	all dis	Call dis	Call dis	Call dis	Call dis	Call dis
Numbering plan	Station1	Site 1 Bor	OUEST	V	0130962000								2000								
Number blocks	Station1	Site 2 Nan	OUEST		0130962700							-	2700	1							
A Installation numbers	Station2	Site 2 Pari	CENTRE		0130457000				_		_		7000		_						
	Station3	Site 3 Rei	ESI	V	01309/2300				-	-			2300		_						
🕜 Technical characteri																					
Directory managem																					
🖉 Subscribers manage																					
Consultations																					
/ Terminals managem																					
T Mitel applications																					
		_		_				_	_	_		_			_				_	_	
	Ad	d 🗌	Modify	Delete	1		۹,	*											mport	Ex	port
	Telephony	's log			/																ņ
	₹ ▼ □	ate 🛛	Site 🛛	No	de /		olica	ation	V		Comn	nunity	y 🛛 🛛	V Re	gio 🏹	Actio 🛛	La	ibel S	Us V	Comme `	7
	03/2	26/15 1											М	ulti Reg	ion1	Director	Annuai	ire LDAP :	admin		
	03/2	26/15 1		/			_						м	ulti Reg	ion1	Director	Annuai	ire LDAP :	admin		
	03/2	6/15 1		/		1			1				M	ulti Rea	ion1	Director	Annuai	ire I DAP	admin		+
				/																	

Search field on the different items of the column.

5.9 **GENERATION**

This phase is necessary for updating the MiVoice 5000 Manager database.

- Select the multisite in Menu Administration>Topology.
- Click Configuration.
- Click Generation.
- Click OK.
- Click Next or Import if the directory files must be imported again.
- Click Read.
- Click Next.
- Wait for the sites to be generated.
- Click Finish.

5.10 CONFIGURING THE DIRECTORY CONNECTION FOR SITES

During a first installation, it is important to define the directory database(s) on each multi-site site:

Menu Telephony service>Subscribers> Directory>Parameters>Connections - Configuration tab.

🕅 Mitel 🛛	Telephony service		Guyancourt	٩	
Web Admin home Subscribers Directory Settings Connections System Dialing plan Network and links Reception Voice mail and tones Fast links	Directory connections settings Telephony service-Subscribers-Directory-Se Configuration Name resolution Directory configuration base EXP Type of server Name of server or IP address : Port Base or URL : Login Password Max number of answers by request Regeneration of internal records	tings=Connections (1.1.1) n Dialing service EXTERN. ▼ 127.0.0.1 389 ou=local.o=AASTRA.dc=DOMAIN.dc=com cn=Manager.dc=DOMAIN.dc=com 50	¢ ۵ ک	• 🎧 🕵 🔉 C, 📄 C, I	
	Reduced directory				

For more information, see Section 7.2.

5.11 MANAGING PLACE AND DID NUMBERS FOR SUBSCRIBERS

The Community is linked to a Place. It is while configuring the Place in the subscription that the Community is initialised in the subscription.

For subscriptions created already (before configuring Community mode), it is necessary to implement an update, by importing/exporting the numbers, in order to configure each subscription in Community mode.

5.11.1 MASSIVE SUBSCRIBER CREATION

For a new configuration, use the massive creation form, from Menu **Telephony>Subscriber** management>Massive creation – Massive creation tab.

	Telephony (C
	B Subscribers management
🕅 Mitel	Mass creation
	Region : "Region1" - Multisite : "Multisite" - Site : ""
User: M7450 Numbering plan Technical characteri Directory managem Subscribers manage Research Unitary creation Mass creation Mass creation Mass treatment foll Web Client Profiles management Consultations Terminals managem Mitel applications	Otherse creation Region 1" Region 1" evaluations in the state of the s
Subscrubers management Research Unitary creation Mass creation Mass treatment foll Web Client Profiles management Consultations Terminals managem Mitel applications	Projon1 Multate Mass creation Directory mass modification UserPortal modification Profiles Set authentication Proper the mass programmation of subscribers Prepare the mass programmation of external records Prepare the mass programmation of alias records Concents an Excel template New Cenerate an Excel template Import New New

Massive creation is site-based and is performed through import/export.

- Select the site.
- Click **New** to export the file to be configured.
- Then fill in the different tabs.

In the **DIRECTORY** tab.

The **Place** column is used to assign a geographic location to each user.

The Community/place combo box corresponds to the configuration made in the previous phases.

Name	Firstname	Phone number	Place	Hierarchy	Gender	Function	Adress	Email
Dupont	Eric	7001	(CENTRE) Site 2 Paris	STE 0/SERV 0				
Lift2		5002	(CENTRE) Site 2 Paris	STE 0/SERV 0				
Durant	Paul	2001	(WEST) Site 1 Bordeaux	STE 0/SERV 0				
Smith	Robert	2701	(WEST) Site 2 Nantes	STE 0/SERV 0				
Lift1		5001	(WEST) Site 1 Bordeaux	STE 0/SERV 0				
Lift1-A		5011	(WEST) Site 2 Nantes	STE 0/SERV 0				
Lift3		5003	(EAST) Site 3 Reims	TE 0/SERV 0				
Dudu	Franck	2302	(EAST) Site 3 Reims	STE 0/SERV 0				
		1					1	

In the TECHNIQUE tab

Name	Firstname	Phone number	Place	Plan 1	Plan 2	Plan	plan	Plan	blan	Plan	Þlan i	Company / Depai
Name	rinsulatile	i none number	Tidee	I Idii I	T IGH 2	Idii	ian	- iaii -	ian	ian	Tan	company / Depa
Dupont	Eric	7001	(CENTRE) Site 2 Paris	0130457000	4000							STE 0\SERV
Lift2		5002	(CENTRE) Site 2 Paris									STE 0\SERV
Durant	Paul	2001	(WEST) Site 1 Bordeaux	C								STE 0\SERV
Smith	Robert	2701	(WEST) Site 2 Nantes									STE 0\SERV
Lift1		5001	(WEST) Site 1 Bordeaux	(STE 0\SERV
Lift1-A		5011	(WEST) Site 2 Nantes									STE 0\SERV
Lift3		5003	(EAST) Site 3 Reims									STE 0\SERV
Dudu	Franck	2302	(EAST) Site 3 Reims									STE 0\SERV

• Click Import in the Import area to import the configured file again.

83	Subscribers m	anagement				
0	Mass creation					
Ana	lysis of data to impor	t				
In	ported file:	C:\Users\pauchar\Documer	te\Region1_Multiste1_Queter1_	PAUode		
8	subscribers to import				Reload	Back Next
V	Site	Name	First name	Hierarchy V	Number	Informations V
9	Cluster1	Dudu	Franck	STE 0/SERV 0	2302	Directory informations, Technical record, 0
Q	Cluster1	Lift3		STE 0/SERV 0	5003	Directory informations, Technical record, 0
Q	Cluster1	Lift1-A		STE 0/SERV 0	5011	Directory informations, Technical record, 0
Q	Cluster1	Lift1		STE 0/SERV 0	5001	Directory informations, Technical record, 0
Q	Cluster1	Smith	Robert	STE 0/SERV 0	2701	Directory informations, Technical record, 0
Q	Cluster1	Durant	Paul	STE 0/SERV 0	2001	Directory informations, Technical record, 0
Q	Cluster1	Lift2		STE 0/SERV 0	5002	Directory informations, Technical record, 0
2	Cluster1	Dupont	Eric	STE 0/SERV 0	7001	Directory informations, Technical record, 0

- Click **Next** to start the massive action.
- Click Program.
- Selective listing may be made in the **Subscriber management** menu:

Research													
Search criterias	Subscriber search result												
Global Advanced	To reduce												
Region													
Region1	E Region : Region1 (1 its	sm)											
Multiarte	Multisite : Multisite	1 (3 items)											
Multisite1	E COMMUNICACIÓN D	(Diterits)	Name	First came		aust.	Eathuna	l set el	Tune	18	Group	Ecofile	Chan
Community	Cluster1	2000	Churant P	THAT SHOTTLE	STERISER	13096	Sin	SIP	internal		en walk	Thomas	- Contra
•		2001	Durent	Paul	are order t	13096	-4			-			
She		2701	Smith	Robert		13096							
Cluster1		5001	Lift		-								
Location		5011	Lifi1-A										
	Community : EA	ST (2 items)											
Subscriber name	Site	Pho	Name	First name	Admin. hie	Publi	Set type	Set m	Type	2	Group	Profile	Stat
	Cluster1	2302	Dudu	Franck	STE 0/SER	13097			Internal				
Subscriber sumbar	Conservation and the	5003	Lin3										
	E Community : CE	NTRE (2 item	18)	- Proprietor	I and the second			(second		1			
Test Manual .	Site	a Pho	Name	First name	Admin. Ine	Publi	Set type	Set m	type		Group	Frome	State
rech. merarchy	Cluster1	5002	Lift2	Dela	STEUSER	01004			Internal				
(# X		1001	Outpore.	Bic		01304							
Admin. hierarchy													
*													
GIC													
Profile				D3									
*													
Search													
Reinitialise													

Then configure the sites on the iPBX site as indicated in Chapter 6.

5.11.2 MASSIVE DIRECTORY MODIFICATION

Massive directory configuration can be made from Menu **Telephony>Subscriber management** >Massive creation – Massive directory modification tab.

- Click **Numbers** (**Export area**) to export the directory.
- Make the modifications in this file.
- Then click **Numbers** in the **Import** area. The file is taken into account to update the directory characteristics in the LDAP database.

Note: Wait for the report in the Telephony End of Import log bar before management.

5.11.3 CREATING SUBSCRIBERS INDIVIDUALLY

Menu Telephony>Subscriber management>Individual creation

The list of Communities is proposed when a subscriber is being created and depends on operator rights.

Depending on the Community chosen, the corresponding rights are displayed.

Example: creating Subscriber Abo2007 in the Centre Community (Com1)

8 Subscribe	ers manage	ment						arile, (i					
Research													
Search criterias		Subscriber search result											
Global Ad	lvanced	To reduce											
Region													
Region1		E Region : Region1 (1 ite	ຫງັ										
Multisite		Multisite : Multisite	(3 items)										
Multisite1		Community : WE	ST (5 items)	Constant of the		Langenaria	-			1		1.0000000000000000000000000000000000000	
Community		Site	A Pho	Name	First name	Admin, hie	Publi	Set type	Set m	Туре	Group	Profile	State
And a state of the	100	Cluster1	2000	Durant P	-	STEOSER	13096	Sip	SIP	internal			
6 m			2001	Durant	Paul	-	13096		_				
2000			2/01	Smith	Robert	-	13096	1					
Cluster1			5001	LIDIA			_		_	_	_		
Location		C. C	T (7 there)	Unita									
		E Community : EA	a (2 liems)			Lawrence			1	1 -	1		
Subscriber name	6	Site	P/10	Name	trist name	Admin. nie	Public	Sectype	Sec m	Type	Group	Protie	State
		ClusterT	2302	Dudu	Franck	STEWSER	13097			Internal			
Subscriber numb	ier i	Community CD	TDE 12 des	LINS									
	1	C Community : CE	DE (2 mil	nu)	Entering	I wante and	0.44	Col Land	i waa a		1	0.0	Chefe 1
Task biocochu	1	Sile	5 Prio	reame	rifst neme	Admin. me	Publi	Sectype	Sec m	туре	Group	erome	State
rech. merarchy	(17) (19)	Cluster	3002	Durant	Esia	STEWSER	01004			Internal			
			1001	Duponc	Dic		01304						_
Admin. hierarchy													
GIC													
Profile													
	-				0.00								
1 tur													
Sea	rch												
Reinit	ialise												
Eve	ott												
Em	sil.,												

• Click Next.

Туре	-	
Name	Raymond	
First name	Claude	
Restricted name	Raymond	
Restricted firstname	Claude	
User login		
E-mail		
Function	1	•
Hierarchy	STE 0/SERV 0	
Assistant		
Address		

• Click Next.

Phone	number	A	Community	V		Allocations
		Region1 / Multisite / (CENTRE (Cluster)	4		
Extensions						^
Local number	Short number	🗶 Label		Location Site 2	Paris 🔒	-
Add number	Add short	Confidenti	ality Green list 💌	SIP URI	3	I ()
Plans						
Plan 1 number	Plan 2 number	X PI	lan 3 number	Plan 4 numbe	er 🚺	
Plan 5 number	Plan 6 number	X P	lan 7 number	Plan 8 numbe	er 🚺	
						E
Add compl.	Total Reinit.					
Characteristics fields						
Features	FAC00 Te	ch. hierarchy		Boss line		
Day PSTN	DOM 💌 Be	arer service	Speech 💌	Site	*	
Night PSTN	DOM Pre	edefined forward		Node	2	
Day TL	LIA00 Ha	otline type		Number	0	
Night TL				Usable in calls waiting	queue	
				User supervision (ticke	ts)	
	Fe	numerica around 1		Consistential		
	FO	rwarding group 1		Service class		
	Fo	orwarding group 2		Association allowed		
						M
Print					Previous Finis	sh Cancel Next

- Select the **Place** from the proposed list, limited to the **Centre Community (**in the example **Site 2 Paris)**.
- Click Add Number.

Community	Default	Site 🛆	Туре	Local number	Plans	Name	External nun
ENTRE		Cluster	Local	5000 - 5999		Local1	
ENTRE		Cluster	Local-DID	7000 - 7999	Plan 1	RTC Local1	0130457000-0
tensions	_	Subso	criber number				
000				ocal extension 50	000		
00 01 02 03	04 05 06 07 08 09						
10 11 12 13 20 21 22 23	14 15 16 17 18 19 24 25 26 27 28 29	DID	number 1		DID number 5		
30 31 32 33	34 35 36 37 38 39	DID	number 2		DID number 6		
40 41 42 43 50 51 52 53	44 45 46 47 48 49 54 55 56 57 58 59	DID	number 3		DID number 7		
60 61 62 63 70 71 72 73	64 65 66 67 68 69 74 75 76 77 78 79	DID	number 4		DID number 8		
80 81 82 83	84 85 86 87 88 89						
90 91 92 93	94 95 96 97 98 99						
<	»>	5099					
						Cancel	ОК

Choix des numeros							
Communauté	Défaut	Site 🛆	Type de plan	Numérotation locale	Plans	Nom	Numérotation
CENTRE	V	Cluster	local	5000 - 5999		Local1	
CENTRE		Cluster	local-RTC	7000 - 7999	Plan 1	RTC Local1	0130457000-013
Numéros		Numér	o abonné				
7000			Nu	uméro local 7000			
00 01 02 03	04 05 06 07 08 09						
10 11 12 13	14 15 16 17 18 19	Numé	ero SDA 1 01	30457000	Numéro SDA 5		
20 21 22 23	24 25 26 27 28 29 34 35 36 37 38 39	Numé	iro SDA 2		Numéro SDA 6		
	AA 45 46 47 48 49				Handro ob/ro		
50 51 52 53	40 40 47 40 40 54 55 56 57 58 59	Numé	ro SDA 3		Numéro SDA 7		
60 61 62 63	64 65 66 67 68 69	Numi			Numéro SDA 9		
70 71 72 73	74 75 76 77 78 79	Nume	IO JUA 4		Numero SDA 6		
80 81 82 83	<u>84</u> 85 86 87 88 89 94 95 96 97 98 99						
«	>>	7099					
						Annuler	ОК

• Then choose any of the available numbers for the range in question, the number to be assigned.

Click OK.

Add number	Add short	Confidentiality Green list	SIP URI	10	
ans					
in 1 number 013045	57000 🐹 Plan 2 number	🗱 Plan 3 number	🐹 PI	an 4 number	
n 5 number	🔀 Plan 6 number	🗱 Plan 7 number	🐹 PI	an 8 number	

• The DID number of Plan 1 is entered.

This number may be in E164 format if the prefixes have been set to the new multi-site topology.

• Then program the directory and technical records.

5.11.4 SEARCHING FOR SUBSCRIBERS

Menu Telephony>Subscriber management>Search

A subscriber search can be made with the Community and Place search criteria.

5.11.5 RELOCATING A SUBSCRIBER

Menu Telephony>Subscriber management>Search

To change a subscriber's Community (need to change the number, place, etc.), you must first carry out a relocation operation.

5.12 EXTERNAL DIRECTORY SYNCHRONISATION

In Community mode, for profile-based subscription management, it is necessary while creating subscriptions through directory synchronisation to specify the following in the remote directory database:

- A Community
- A profile.

IMPORTANT NOTE: This applies only when the profiles are used for AD synchronisation. Profile mode is not mandatory; in this case, no need to manage the Community in the synchronisation (mode in which only one directory record is created).The default hierarchy of AD synchronisation not managed by the MiVoice 5000 Manager causes the SDN service to stop.

For more information, see the document AMT/PTD/NMA/0061 - MiVoice 5000 Manager - Directory configuration.

5.13 ADDITIONAL OPERATIONS

5.13.1 ADDING A NUMBERING RANGE TO AN EXISTING COMMUNITY

In this case, it is necessary to re-import the numbering range file.

5.13.2 ADDITION OF A COMMUNITY REQUIRING THE DEFINITION OF A NEW NUMBERING RANGE

In this case, it is necessary to re-import the numbering range file.

5.13.3 ADDING A SITE (MIVOICE 5000 CLUSTER SERVER, NODE, SITE) USING AN EXISTING COMMUNITY

In this case, it is not necessary to re-import the numbering range file.

5.13.4 ADDING A COMMUNITY USING SOME NUMBERING RANGES WITH AN "ALL COMMUNITIES" RANGE

In this case, it is not necessary to re-import the numbering range file.

6 CONFIGURATION WITHOUT MIVOICE 5000 MANAGER

CAUTION: For a multi-site configuration, all sites must be in the same mode with or without SDN.

6.1 ACTIVATING DID MANAGEMENT MODE BY SDN

Menu Telephony service>Subscribers>Rights>General parameters, System tab.

Web Admin home Subscribers Rights General settings System Dialing plan Network and links	Subscribers miscellaneous settings Telephony services/subscribers-Rights-General settings (141) Subscriber System Rights Application Network Se	corrity Com abbreviated dialing - number of numbers - numerous prefixes	
Reception		Subscriber forwarded to exterior	
Voice mail and tones		- Charging	CALLING 🗸
		- send ident.	CALLING NUMBER 🗸
		Feature class management	NO 🗸
		TL class management	NO 🗸
		Partition class management	
		DID numbering by SDN	
		- Plan used by DID public numbers	PLAN 1 V
		- Installation number	0130964286
		Subscri	ptions migration
		N° without external prefix for SIP set	
		Routing of EXT calls	LOCALISATION SITE 🗸
		Check password when opening TAPI sess	ion 🗆
		Power saving function	
		Dual homing settings - daily realignment (hh:mm) - immediate realignment of	01:37

The management of DID numbers via SDN can be activated via the line **DID Numbering by SDN**.

When the box is checked, the pbxPerso\corporate branch is automatically created in the LDAP directory (if it does not exist).

Ticking this box displays the following lines (if the subscriptions have not yet been migrated and if the Pbx is not a cluster node):

• **Plan used for public DID numbers**: Option for selecting one of the internal plans (1-8) open in the PBx configuration.

This plan allows the correct DID number (didPlan1-8) to be copied from the **Number** record to indicate which DID number is public in the **Number** record (**didNumber** attribute) and in the **People** record (**didNumbers** attribute).

• **Installation number**: If an IID number is associated with the previously selected plan, it is displayed in E.164 format. This value will be used to fill in the characteristics of the place created during the migration of subscriptions.

Management can be carried out in several ways:

- By migrating the subscriptions (automatically),
- Manually,
- Through massive action.

6.2 MIGRATING SUBSCRIPTIONS TO DID NUMBER MANAGEMENT VIA SDN

6.2.1 PRINCIPLE

To facilitate the procedure when there is no MiVoice 5000 Manager in the configuration, Web Admin features a **Subscription migration** button from Menu **Telephony Service>Subscribers>Rights>General parameters**, **System**tab, used to automatically:

- Create a default location,
- Update the parameters,
- Delete the additional numbers,

Subscribers Rights	Telephony service>Subscribers>Rights>Get	eral settings (1.4.1)	
General settings	Subscriber System Rights	Application Network Security	
System		Com abbreviated dialing	
Dialing plan		- number of numbers	1000 •
Network and links		- numerous prefixes	L
loice mail and tones		Subscriber forwarded to exterior	
ast links		- Charging	CALLING ¥
		- send ident.	CALLING NUMBER 🗸
		Feature class management	NO 🗸
		TL class management	NO 🗸
		Partition class management	0
		DID numbering by SDN	
		- Plan used by DID public numbers	PLAN 1 -
		- Installation number	0130964286
		Sub	scriptions migration
		N° without external prefix for SIP set	0
		Routing of EXT calls	LOCALISATION SITE V
		Check password when opening TAPI	session 🗍
		Power saving function	D
		Dual homing settings	
		- daily realignment (hh:mm)	01:37
		- immediate realignment of	~

Migration remains optional and it is possible to set up subscriptions manually or through bulk import.

If a migration is started on a configuration that has already been completed, there will be no change to subscriptions that already have a place in the LDAP directory.

Details of the actions taken

Creating locations

To create a default location, Web Admin uses the two parameters:

- Value of the public DID number plan
- Value of the installation number (IID)

The IID parameter is added to the menu in order to associate it with the default location. This parameter is initialised from the parameter currently available in the plan configuration:

IID definition		<i>,</i> 0
Telephony service>Network and links>Network>AID handling>IID (4.2.6.5)		_
IID 0: internal plan	PLAN 1 V	
or direction	······· v	
number	0130960000	
restricted presentation	NO ¥	
IID 1: internal plan	🗸	

Generally, this value is not filled in and must be in E.164 format.

During the migration, in the LDAP directory, a place is created in the **pbxPerso/corporate** branch and this place is assigned to all PBX subscriptions:

Place_<No site>_001, <No Site> is the number of the site that created the place (3 digits).

Case of multisite

In a multi-site configuration, if several sites have the same installation number (IID) with the same internal plan, only one place is created.

It is the place of the first site that has migrated, and the subscriptions of the other sites will be assigned from this place.

Updating the subscriptions

This action allows the configuration of DID numbers in the plan opened and configured in the subscriptions.

The Migration process updates all subscriptions to configure the following parameters in the directory record of each subscription (all types of subscriptions including groupings):

placeIndex: place_<site number>_XXX

didNumberplan<n>: <previously configured value>

The previous configuration is taken into account if it exists:

_				_	Par son numéro d'annuaire 3000								
	A	B	С		Terminaux	Touches	Renvois	Domotiques	Répertoire	Multi-li			
1	Reference	4109-L	1										
2	AnnuAbo	4109-20626-0-0-0	3000		Etat abonné			EN SERVICE	-				
3	EtatAbo	4110-20630-0-0-0	EN SERVICE	- 4	4 Type de l'abonné LOCAL								
4	UnlockAbo	4110-29265-0-0-0			Number d'approprie			2000					
5	TypeAbonne	4110-28786-0-0-0	LOCAL		Numero d'annuaire		3000						
6	AnnuAbo	4110-20631-0-0-0	3000		N° annuaire SD/	A PLAN 1		3000					
7	ClearTProg	4110-20629-0-0-0			N° public PLAN	1		+33123453000	453000				
8	AnnuSDA1	4110-20632-0-0-0	3000		Nom de l'abonr			ARO 3000					
9	AnnuSDAext1	4110-28911-0-0-0	+33123453000		Norri de l'abornie		ABC 5000						
10	AnnuSDA2	4110-28912-0-0-0			Botte vocate inte	egree (BVI)							
					nom de elsere								

didNumberPlan<n>: AnnSDAext<n> or if it is empty: AnnuSDA<n>

Several values can be configured in the same directory record, as a value is added for each additional number for open plans.

Additional numbers

The migration procedure removes all additional numbers.

6.2.2 PROCEDURE

Menu Telephony service>Subscribers>Rights>General parameters, System tab.

After checking the **DID Numbering by SDN** box and filling in the **Plan used for public DID numbers** and **Installation number** fields:

- Click the **Subscription migration** button: Proposed if the previous 2 fields are filled in (i.e. installation number not empty).
- Confirm the action to take by clicking **Confirm migration**;

Subscriber migration starts.

At the end of the migration, if no errors were detected, a successful-completion message is displayed.

A call distribution number is not configured during the migration process and must be configured manually. See the relevant section.

In the migration procedure, ranges are not created automatically even if they had been previously defined. See the relevant section.

Other remarks:

If the migration is interrupted (by restarting the PBX for example, or disconnecting the directory), the migration of the remaining subscriptions will be proposed after the PBX is restarted or after restoring the connection to the directory.

Subscription migration is not proposed in the following cases:

- iPBX restart after an upgrade,
- Restore,
- Rollback,
- The DID mode via SDN is already active with places in the directory.
- On a TOTAL startup with **DID Numbering by SDN** active, with subscriptions created by default, in DID configuration by SDN
- The migration status is stored locally to allow the administrator to restart the procedure in the event of an error. When the procedure is started from another site, the same place can be used if the administrator enters the configuration of an existing place (Default plan and IID).

6.3 CONFIGURING LOCATIONS

6.3.1 CREATION

Menu **Telephony service>Dialing plan>External number configuration>Locations management>Place names**.

This menu is used to create the places names (20 UTF8 characters max.) in the **pbxPerso\corporate** branch of the LDAP directory.

Up to 256 places can be created. Place names must be unique. The ranking is displayed in ascending alphabetical order.

The creation of places in the LDAP database then allows them to be assigned to subscribers when they are created or modified.

The places assigned to subscribers are entered in the Subscriber records in the LDAP database.

For each place in the list, a **Place** link takes you directly to the **Location Characteristics** menu.

It is not possible to delete a Location if it is still assigned to at least one subscription.

Massive creation can be carried out by importing a CSV file.

6.3.2 CHARACTERISTICS

Menu Telephony service>Dialing plan>External number configuration>Locations management>Locations characteristics.

Characteristics of position GUY Telephony service>Dialing plan>External numbers configuration>Locations r	nanagement>Locations characteristics (3.4.1.2)	C
Installation number PLAN 1	0130964286	
Answering service PLAN 1	4444	

This selection menu allows you to choose the Location (from the list of names declared in the directory) and to enter its characteristics.

For each internal plan opened in the configuration, the following fields are displayed:

PLAN n installation number (max 20 characters): This number is an External Line number or an TL number. An External Line number can be entered in national or E.164 format.

PLAN n response service: An installation number must have been previously entered for PLAN n. Therefore, deleting a PLAN n installation number will delete the PLAN n answering service. Each **answering service** line has an access link to the characteristics of that service.

Several occurrences of the same installation number may exist in the same Location or in other Locations.

An answering service is linked to an installation number.

Massive creation can be carried out by importing a CSV file.

Rules:

- When an installation number NI is entered (in an empty field) for a PLAN n and an occurrence of NI already exists with an associated response service SR, the response service associated with the NI entered for PLAN n takes the value of the SR.
- When an answering service is entered (in an empty field) for an installation number NI, all occurrences in all Locations of that NI are updated with the answering service entered.
- When an answering service is deleted for an installation number NI, all occurrences in all Locations
 of this NI are updated (deletion of answering service).
- For an installation number NI1 associated with an answering service SR1, if that answering service is modified by SR2 and SR2 is associated with installation number NI2 occurrences:
 - The associated answering service of all occurrences in all NI2 Locations are deleted.

- The answering service of all occurrences in all NI1 Locations are replaced by SR2.
- When an installation number is changed (new NI) and is associated with an answering service SR, all occurrences in all Locations of installation numbers previously associated with the answering service SR have their answering service deleted and the answering service SR is assigned to all occurrences in all NI Locations.

6.4 **CONFIGURING EXTERNAL NUMBER RANGES**

Menu Telephony service>Dialing plan>External number configuration>External number ranges.

Configuring external number ranges allows DID numbers to be assigned automatically when subscribers are created.

This action allows the configuration of DID numbers in the plan opened and configured in the subscriptions.

DID numbers are entered in the Subscriber records in the LDAP database.

External numbers configuration		🐣 D	0	ら	ъ	P.	Ľ۵	범	F	۲
Telephony service>Dialing plan>External numbers configuration	(3.4)		• · ·	 -	÷			0	-	
Locations management										
Names of locations	Locations characteristics									
Answering services										
External dialing ranges										
Names	Characteristics						Displ	ay		
Internal plans definition										

6.4.1 NAMES

Menu Telephony service>Dialing plan>External number configuration>External number ranges>Names.

This menu is used to create up to 250 external number ranges for DID number management via SDN.

For each of the 250 lines, a link allows you to go directly to the characteristics of the range or to the menu for viewing all the ranges.

Massive creation can be carried out by importing a CSV file.

6.4.2 CHARACTERISTICS

Menu Telephony service>Dialing plan>External number configuration>External number ranges>Characteristics.

This menu is used to enter the characteristics of the selected range:

For the local tranche: The 2 fields (-start and -end) are used to enter the limits of the range of the internal number ranges concerned by this range.

Notes:

If the - start field of this section is empty, the following lines are not displayed.

The - number of items field (not modifiable) counts the number of internal numbers between - start and - end inclusive (= end - start + 1).

Then for each internal plan opened in the iPBX configuration, a **PLAN n public range** section is displayed.

In the PLAN n public range sections, the size of the - start and - end fields is 20 characters max. The numbering type entered is External or TL line. The External Line numbers can be entered in national or E.164 format.

Note: A check is made to ensure that there is no overlap between PLAN n public range among all external number ranges (for DID number uniqueness).

Massive creation can be carried out by importing a CSV file.

6.4.3 DISPLAY

Menu **Telephony service>Dialing plan>External number configuration>External number** ranges>Display.

This menu is used to list all the external number ranges declared for DID number management via SDN.

6.5 CONFIGURING THE DIRECTORY CONNECTION FOR SITES

During a first installation, it is important to define the directory database(s) on each multi-site site:

Menu Telephony service>Subscribers>Directory>Setting>Connections - Configuration tab.

Directory connections settings	日日日 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Telephony service>Subscribers>Directory>Sett	ings>Connections (1.1.1)
Configuration Name resolution	n Dialing service
Directory configuration base EXP	
Type of server	EXTERN. 🗸
Name of server or IP address :	127.0.0.1
TLS	
Port	389
Base or URL :	ou=local,o=AASTRA,dc=DOMAIN,dc=com
Login	cn=Manager,dc=DOMAIN,dc=com
Password	
Max number of answers by request	1000

Regeneration of internal records

6.6 SUBSCRIPTION MANAGEMENT

6.6.1 CREATION

Menu Telephony service>Subscribers>Subscriptions> Create.

In DID management mode in SDN, the **Location** option shows the names of the Locations defined in the directory.

The choice of a Location is mandatory for creating subscriptions (all types).

When a subscription is created, this field is associated with the corresponding subscription number record.

In case of DID number management without MiVoice 5000 Manager (except for ATDCs (main number) and general-purpose subscription), if the subscription number to be created is found in one of the defined external ranges (refer to Section 6.1), the characteristics of this range are used to fill in the DID PLAN 1-8 numbers of the subscription (directory attributes: didPlan1-8).

The didPlan n of the number record (if not empty), where n corresponds to the **-Plan used for the public DID numbers** selected in Menu **Subscribers miscellaneous parameters** is copied into the **didNumber** attribute of the **Number** record and into the **didNumbers** attribute of the **People** record if the subscription is not on the Red List.

6.6.2 SUBSCRIPTIONS CHARACTERISTICS (EXCLUDING HUNT GROUPS)

Menu Telephony service>Subscribers>Subscriptions>Characteristics.

This menu gives access to the characteristics of non-hunt group type subscriptions.

In DID management mode in SDN, the **Location** option, specific to this mode, shows the names of the Locations defined in the directory.

bscription 2000	ribers>Subscript	ions>Characteris	tics (1.2.3)			🛎 🖪 '	S 🖓 🖻 🕽	に 目 均	ł
			By dire	ctory numbe	r 2000]			
Characteristics	Directory	Terminals	Keys	Forwards	Home aut	omation	Phone book	Multi-lines	
	Subsc	r. status		IN	SERVICE	~			
	Subsc	riber type		IN	FERNAL				
	Direct	ory number		20	00				
	Locati	on		Pl	ACE_001_	001 🗸			
	DID ni	umber PLAN 1	L						
	Extens	ion name		AB	O 2000				
	Integra	ated voice bo	x (IVB)						
	Termir	nal authentica	tion	\checkmark					
	- value	e		hC	ve4SF1IBL2	WFU3			

This field consists of the list of names of Locations defined in the directory. The value displayed concerns the value of the **placeIndex** attribute of the subscription number record. This field is modifiable.

When a space is assigned (or the assignment is changed), the old additional DID numbers are deleted.

This makes it possible to avoid migration when configuring DID numbers manually or through CSV import (see Section 6.1).

DID Plan n No. lines (20 characters max.): Display of the values corresponding to the internal plans opened in the iPbx configuration (External Line format in national or E.164 format, or TL numbering).

The value displayed concerns the value of the **didPlan n** attribute of the subscription number record. These fields are pre-filled if the subscription was found in an SDN external number range when it was created.

These fields can be modified by the user.

If the DID number corresponding to the - Plan used for public DID numbers (Menu Telephony Service>Subscribers>Rights>General parameters System tab) is modified the didNumber attributes of the number record and didNumbers of the people record (if the subscription is not on the Red List) are updated.

Multi-line subscribers

When a secondary line is created, the Location assigned to this line is that of the main line, which can be changed in the **Characteristics** tab.

If the number of the secondary line is found in the SDN external ranges, the DID numbers are automatically configured for this line as described when creating a subscription

6.6.3 HUNT GROUP CHARACTERISTICS

Menu Telephony service>Subscribers>hunt groups and companies>hunt groups>Characteristics.

This menu gives access to Hunt group, Super hunt group, and VM hunt group characteristics.

The operation is identical to that of subscriptions. See Section 0.

6.7 FIRST INSTALLATION

For first installation, the feature is deactivated by default (box not ticked).

Then follow the procedures described above.

6.8 MIGRATION FOLLOWING AN UPGRADE TO R7.2

After an upgrade to R7.2, with DID Numbering via SDN, and if DID number management via SDN is enabled, the subscriber migration procedure is proposed to update the LDAP database. See Section 6.2.

Subscription migration is not offered if the Pbx restarts after an upgrade, restore or rollback, or if DID by SDN is already active and Locations are present in the directory.

7 IPBX CONFIGURATION (WITH OR WITHOUT MIVOICE 5000 MANAGER)

7.1 ACTIVATING DID NUMBERING BY SDN

- To activate this mode, tick DID numbering by SDN, in Menu Subscribers>Rights>General settings, System tab.
- CAUTION: For a multi-site configuration, all sites must be in the same mode with or without SDN.

Note: For a Cluster configuration, this mode should only be activated on the Cluster Server. The nodes are automatically configured.

Web Admin home Subscribers	Subscribers miscellan Telephony service>Subscribe	eous settin s>Rights>Gene	gs eral settings (1.4.1)			% <u>C,</u> ♥ A ■	
Rights General settings	Subscriber System	n Rights	Application	Network	Security		
System			Com abbrev	riated dialing			
Dialing plan			- number of	numbers		1000 ~	
Network and links			- numerous	prefixes			
Voice mail and tones			Subscriber fo	orwarded to	exterior		
Fast links			- Charging			CALLING	•
i use tri no			- send ident			CALLING NUMBER	~
			Feature class	s manageme	nt	NO 🗸	
			TL class mar	nagement		NO 🗸	
			Partition cla	ss managem	ent		
			DID number	ing by SDN			
			- Plan used I	by DID public	numbers	PLAN 1 🗸	
			- Installation	n number			
			N° without e	external prefix	for SIP set	0	
			Routing of E	XT calls		LOCALISATION SITE -	
			Check passv	word when o	pening TAPI sessio	n 🗆	
			Power savin	g function		0	
MV5000-R7.2 RC /B603 FRA Site: 001-SITE LOC			Dual homing	g settings			
5/11/21 15:55:47			- daily realig	inment (hh:m	im)	01:37	
DIRECTORY: TIS CONFIG. LOAD	*		- immediate	realignment	of	~	
ULANKA AVIUNITI				1997			

Automatic modification of the search via Directory on all the trunk groups

The configuration of the previous parameter validates by default the search via directory on all the trunk groups declared in Menu **Telephony service>Network and links >Nework>Trunk groups>Characteristics**.

Search via directory: YES

If this box is ticked, the DID numbers are saved in the LDAP database of MiVoice 5000 Manager and managed by the dedicated external number server.

Some menus are then implemented for this context.

Note: If the box is not ticked, the DID numbers are saved on the iPBX table and managed either through simple translation, or via multi-directories.

When the box is ticked, all the trunk groups naturally process the new incoming calls without modifying their characteristics.

Web Admin home	FX.SIP VOICE IP BOTHWAY (advanced mode)					
Subscribers		Telephony service>Network and links>Network>Tr	unk groups>Characteristics (4.2.1.2)			
System		iones management perore answer	100+50F+F-Early-Media V			
Dialing plan		 support P-Early-Media 				
Notwork and links		Re-invite without SDP allowed				
Network		Reject T.38	415 Unsupported Media Type 🗸			
Trunk groups		-				
Characteristics		REFER sending				
Characteristics of trunk group		her en senang	0			
FX.SIP VOICE IP BOTHWAY		Support of video				
Reception		Support of T.38				
Voice mail and tones		Support of other medias (IM_etc_)				
Fast links		SPTP support	SPTP proferred w			
		SRIF support	SKIP preferred V			
			CODT CODUT			
		Bearer type incoming	CCB1+CCBN1 ~			
		Calls from	RESEAU 🗸			
		Priority calls if transit				
		Search DID numbers				
		- incoming digit translator number				
_	_	- search via directory				
		reject of numbers on assigned				
		Pre-answering message, caller charged				
		- if called party free or busy 1				
		- if called party busy 2				
MV5000-R7.2 RC /B603 FRA		- if number not assigned				
Site: 001-SITE LOC		Transf. acc. to called pty comp-dept	ō			
* DIRECTORY: TIS CONFIG. LOAD		Transfer to	OR CR1 H			
16/11/21 15:55:47		manarer to	O GIT +			
* DIPROTORY - NS STOP	*					

7.2 CONFIGURING LDAP DATABASE CONNECTIONS

The **Numbering service** tab is used to configure the access parameters for two number translation databases (priority 0 and 1 directory databases).

🕅 Mitel 🕴 Te	lephony service		Guyancourt	٩
Web Admin home Subscribers Directory Settings Connections System Dialing plan Network and links Reception Voice mail and tones Fast links	Directory connections settings Telephony senices-Subscribers-Directory-Sen Configuration Name resolution Service in use - for abbreviated - forbidden numb - for DID numbers Broadcast Search base directory priority 0 - type of server Search base directory priority 1 - type of server	In Dialing service ✓ INTERNAL ▼ FALLBACK BASE EXP ▼ LDAP ▼ 127.0.0.1	in 1990 - 19900 - 19900 - 19900 - 19900 - 1990 - 1990 - 1990 - 1990 - 1990 - 19	슈 📭 라 다 🗐 터 별 번 (별
X5 -R6.1 RC /E301 FRA	- name of server of IP address : - port - base or URL : - login - password	389 ou=local,o=AASTRA,dc=DOMAIN,dc cn=Manager,dc=DOMAIN,dc=com	c=com	

The advantage of defining two connections on two databases is that when one of the two databases is inaccessible, all requests are redirected to the one that is operational.

It is highly advisable to fill in the parameters for the two databases.

Example of two-connection configuration:

An LDAP database on MiVoice 5000 Manager with a directory replica on MiVoice 5000 Server.

From Menu **Telephony service>Subscribers>Directory>Parameters>Connections** and the **Numbering service** tab,

Tick the Service operational box.

The directory database will then be searched for DID, abbreviated and barred numbers.

Note: If the box is not ticked, the other menu lines do not appear.

BROADCASTING: INTERNAL or MULTISITE

If the value is set to INTERNAL, the service can only be used internally.

The value **MULTISITE** allows SDN service availability to be transmitted to the Multi-site sites.

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TYPE OF SERVER: LDAP or FALLBACK BASE EXP

Directory requests are made through two connectors for two LDAP databases.

These areas are used to first define the directory connection to be made during DID number search.

TYPE OF SERVER: DATABASE FALLBACK EXP: In this case, the search is made in the directory defined in the Configuration tab.

Server type: LDAP:

In this case, the search is made on an external LDAP server.

The following fields are used to identify this server:

SERVER NAME OR IP ADDRESS:

Field with 80 characters maximum (the same restrictions as for the password field).

Server IP address (Default value: 127.0.0.1)

PORT:

Communication port number, value between 1 and 65534 (basically 389).

Default value: None

DATABASE OR URL:

120-character field. All the alphanumeric characters are authorised (upper case and lower case). Punctuated characters and most of the characters obtained with the key combination 'Alt Gr' are not authorised ~{}[]\^@`¤| just like the characters ² & £ \$ μ § ?!".

Default value: ou=internal,o=MITEL,dc=DOMAIN,dc=com

LOGIN:

Field with 24 characters maximum (the same restrictions as for the password).

Default value: cn=Manager,dc=DOMAIN,dc=com

PASSWORD: line with 24 characters maximum

All the alphanumeric characters are authorised (upper case and lower case). Punctuated characters and most of the characters obtained with the key combination 'Alt Gr' are not authorised, such as \sim {}[]\@`¤| just like the characters ${}^{2}\& {}_{y}$?!".

During the input, the password is clearly displayed. Once the password is validated, the characters are replaced by '******** '. It then becomes impossible to display the password clearly.

Default value: NO

Note: To optimise the directory requests, the SDN service uses a 10-minutes cache: a Location or subscription modification (DID number or Location number) can only be active after 10 minutes.

7.3 CONFIGURING THE NUMBER TRANSLATION SERVICE

The purpose of this phase is to define the location of the different number translation servers on the multi-site networks.

Note:

The configuration shown is the default configuration and is recommended by MITEL.

8 servers may be accessible (if server transmission has been set to Multi-site).

When any of the servers is inaccessible, the directory request is sent to the next one on the list containing the order of priority.

From Menu Telephony service>Network and links>Multi-sites>Service location>Other services.

In the field **By name**, select from the list the line **NUMBER TRANSLATION**.

Mitel Telep	hony service	Guyancourt	٩
Web Admin home Subscribers System Dialing plan Network and links Multi-dite Services location Other services Reception Voice mail and tones Fast links	Selection of a service Telephony service-Network and links-Multi-site-Services location-Other services (4.3.2.5) By its name TRANSLATION OF NUMBERS Select the item	¢ له و	> C 💌 다 다 📕 더 영 단 🖻
Mitel Teleph	nony service	Guyancourt	٩
Web Admin home Subscribers System Dialing plan Network and links Multi-site Services location Other services Service TRANSLATION OF NUMBERS Reception Voice mail and tones Fast links	Service TRANSLATION OF NUMBERS Telephony service-Network and Inko-Multi-site-Services location-Other services (4.52.5) Broadcast priority 1 INTERN Broadcast priority 2 INTERN Broadcast priority 3 SITE BA Broadcast priority 5 · · · · Broadcast priority 6 · · · · Broadcast priority 7 · · ·	4 A L C AL C SIS	⊘ ∁ ॕ ひ С 目 口 当 日 日

• Then select the broadcast type priority 1 (LOCAL SITE or SITE BASIS).

For the **SITE BASIS** option, select the rerouting site in the multi-site configuration (with regard to its priority).

• Then, if necessary, select other broadcast types "priority x", used for rerouting if the previous server is inaccessible.

Note: "Numbering service" must be active, and "broadcast" set to Multi-site mode, in the selected sites. See Section 7.2.

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7.4 CONFIGURING THE NUMBER TRANSLATORS (IF NECESSARY)

7.4.1 CONFIGURING THE ETSI TRUNK GROUP T2 ON NOEUD1

2

Note: A transformer is only necessary if the format of the number received on the network interface is not identical to the format of the external numbers in the LDAP database.

Mitel Telepi	nony service	Guyanco	urt Q	
Web Admin home Subscribers System Dialing plan Network and links Network Trunk groups Characteristics	FT0-ETSI ISDN:T0 BOTHWAY Telephony service-Network and links-Network-Trunk groups-Characteristics (4.2.1.2) Group of Lina specinics acturing overlap dialing - on busy / immediate forward - forward on no answer - automatic callback - local generation of network tones		ም ር የ 2 ዓ ወ ዓ ወ ዓ	8 G 8 C 8
FTO-ETSILSDN:TO BOTHWAY Reception Voice mail and tones Fast links	Used by dynamic link Bearer type incoming Calls from Priority calls if transit Search DiD numbers - incoming digit translator number - search via directory - reject of numbers not assigned Pre-answering message caller char	CCBT+CCBNT • RESEAU •		
XS-R61RC/E301FRA SHE-088-SITELOC 50/03/15 14:45:17 DIRECTORY: THS IN SERVICE SITE #8 30/03/15 14:45:01 DIRECTORY: THS CONFIG. LOAD	- if called party free or busy 1 - if called party busy 2 - if number not assigned Transf. acc. to called pty comp-dept Transfer to On hold broadcasting Overflow broadcasting Trunk group id (tel. record)	OP GP1 V		

Incoming translation to comply with Plan 1 in the LDAP database (adding 0 for 10-digit translation).

🕅 Mitel 🕴 Telep	hony service	Guyancourt
Web Admin home	Incoming: called number - translat. 1	1
Subscribers	Telephony service>Network and links>Network>Translators>Incoming: called party nun	hber (4.2.7.3)
System	Digit to translate	A
Dialing plan	Resulting digits	OA
Network and links Network	Digit to translate	
Translators	Digit to translate	
Incoming: called number - translat. 1	Digit to translate	
Reception	Digit to translate	
Voice mail and tones	Digit to translate	
Fast links	Digit to translate	
	Digit to translate	

7.4.2 OUTGOING HANDLING OF AID TRANSMISSION ON NODE1



Mitel Teleph	iony service		Guyancou
Web Admin home Subscribers System	Outgoing: calling number - translat. 1 Telephony service>Network and links>Network>Translators>Outgoing: calling party nur	mber (4.2.7.2)	4
Dialing plan Network and links Network Translators Outgoing: calling party number Outgoing: calling number - translat. 1 Reception	Digit to translate to plan or to direction and digits Digit to translate	OA PLAN 1 ▼ A	
Voice mait and tones Fast links	Digit to translate Digit to translate Digit to translate		

Outgoing translation to comply with Plan 1 on the operator side (ETSI: 9 digits)

7.5 CALL DISTRIBUTION MANAGEMENT

- 7.5.1 DECLARING ANSWERING SERVICE NUMBERS (DID) WITHOUT MIVOICE 5000 MANAGER
 - Select the Location in Menu Telephony service>Dialing plan>External number configuration>Location management> Location characteristics.

Sélection d'une place Service téléphonie>Plan de numérotation>Configuration des numéros externes>Gestion des places>Caractéristiques des places (3.4.1.2)	🍰 💽 🗞
Par son nom AVIGNON 🗸	
Sélectionner l'élément	
L ₀	

• Assign an answering service number to the IID in the plan concerned:

Characteristics of position GUY Telephony service>Dialing plan>External numbers configuration>Locations r	nanagement>Locations characteristics (3.4.	()	д	₽,	٤,
Installation number PLAN 1	0130960000				
Answering service PLAN 1	4444				

Then configure the answering service in Menu **Telephony service>Dialing plan>External number configuration>Answering service**.

Can also be viewed in Menu Telephony service>Call distribution>Answering services.

Answering services Telephony service>Dialing plan>External nun	nbers confi	iguration>Ansv	vering services	(3.4.2)	🚢 🖪 🗞 ·	ሬ 🖻
		Number	Company	Dept	Handled by	
	1	6000	STE 0	SERV 0	ACC.0	
	2	4444	STE 0	SERV 0	ACC.0	
	3					
	4					
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	6					

7.5.2 DECLARING ANSWERING SERVICE NUMBERS (DID) WITH MIVOICE 5000 MANAGER

Example:

Site 2 Paris (Place) Station 2 (Index Place) NDI plan 1 : 0130962501 Accueil > ACC PARIS : 2501 Site1 Bordeaux (Place) Station 1 (Index Place) NDI plan 1 : 0130962000 Accueil > ACC BORDEAUX : 2000 Site3 Reims (Place) Station 3 (Index Place) NDI plan 1: 0130457000 Accueil > ACC REIMS : 7000

Reminder: For a cluster:

- The ATDCs are declared in the Cluster server.
- The answering service numbers are declared at the location of the clusters (in the nodes or Cluster Server).

Web Admin home		c					
Subscribers	C.dist.ACC.PARI Telephony service>Re	S cention>Call distribution managem	ont>Charactorist	ics (5.1.1)			
System	<< < <	ceptorr cuit all'annaitor managen		(0.1.1)	1234		
Dialing plan	A STATE OF A		B	vits name	CC PARIS		
Network and links	Names Def	nition Users States				100 - L	
Reception Call distribution management	t		Call	dist 0 AC	CPARIS		
Characteristics			Call	dist 1 AC		LIX	
Voice mail and tones			Call	dist 2 AC	CREIMS		
Fast links			Call	dist 3			
			Call	dist 4	-		
	phony service						
min home	DID corporate number	'S				4	C
min home	DID corporate number Telephony service=Reception>	'S DID corporate numbers (5.5)				<u>ش</u>	C
min home ers	DID corporate number Telephony service=Reception>	'S DID corporate numbers (5.5)	Number	Compan	/ Dept	Handled by	C
min home eers	DID corporate number Telephony service-Reception>	'S DID corporate numbers (5.5)	Number 2000 7000	Compan	y Dept ******	Handled by ACC BORDEAUX	
min home ers plan and links	Dhony service DID corporate number Telephony service-Reception>	S DID corporate numbers (5.5) 1 2 3	Number 2000 7000 2300	Company ******** *******	/ Dept ****** ******	Handled by ACC BORDEAUX ACC.PARIS ACC.PARIS	
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In MiVoice 5000 Manager, these numbers correspond to the numbers entered in the **Call distribution** fields of SDN installation numbers.

🔇 Mitel - MiVoice 5000 Manager Clien	t - Telephor	ny																x
	12 Nun	nbering p	lan															
🔯 Mitel	() Insta	allation nur	nbers															
	Region :	"Region1"	- Multisite : "	Multisite" ·	Site : "Cluster													
Ucori M74E0	* Change	Regions/Site	\$															
Coser. M7450	Index	Location	Community	Default	IID plan 1	IID plan	I IID pl	II	II I.	IID p	Call distribut	Call dis	Call dis	Call dis	Call dis	Call dis	Call dis	Call dis
Numbering plan	Station1	Site 1 Bor	OUEST	V	0130962000						2000							
Number blocks	Station1	Site 2 Nan	OUEST		0130962700			1			2700							
	Station2	Site 2 Pari	CENTRE	V	0130457000						7000							
a Installation numbers	Station3	Site 3 Rei	EST	V	0130972300	3					2300							
Technical characteri																		
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7.6 **REDUCED DIRECTORY DATABASE**

It is possible to configure in Web Admin an internal directory database for each iPBX (called reduced directory). This database is used by the SDN service, especially when the main directory databases are no longer available.

This option is available for all Mitel 5000 Gateways type sites and all the nodes of a cluster.

This database is synchronised with the main database and contains the directory data corresponding to the site subscribers (local subscribers or backup subscribers).

In Community mode (see Chapter 5 the database contains the directory data of all the Community subscribers (limited to 3000 records on Mitel 5000 Gateways).

It is activated from Menu **Telephony service>Subscribers>Directory>Parameters>Connections** – Configuration tab.

Note: When the reduced directory database is active, it is only accessible in read only mode; the directory records cannot be modified.

Realignment

2

Reduced database realignment is managed with the backup subscriber realignment of the Dual Homing function. In this case, the realignment time programming function is accessible from Menu **Telephony** service>>Subscribers>Rights>General parameters – System tab.

For immeadiate realignment, tick the **immediate realignment** box.

8 MIGRATION (WITH MIVOICE 5000 MANAGER)



CAUTION: For a multi-site configuration, all sites must be in the same mode with or without SDN.

8.1 CHANGING FROM A MULTI-SITE IN NORMAL MODE TO AN SDN MODE WITH COMMUNITY

To change from a normal multi-site mode to an SDN mode with Community:

- Activate SDN mode + Community in the multi-site.
- Define the Communities using the individual configuration, or by importing .csv files.
- Modify the topology in order to configure the Community in the sites (including the cluster server) and nodes.
- Import the numbering ranges.
- Import the configuration of Locations.
- Import the subscriber configuration: massive modification of subscribers in order to add the Location and fill in the plans in the chosen format (example: Plan 1 = 10 digits). the Communitity is then defined and assigned in the subscription.

8.2 CHANGING FROM A MULTI-SITE IN SDN MODE WITHOUT COMMUNITY TO SDN MODE WITH COMMUNITY

For this, proceed as follows:

- Activate the Community in the multi-site (SDN configuration).
- Define the Communities using the individual configuration, or by importing .csv files.
- Modify the topology in order to configure the Community in the different sites and nodes.
- Import the numbering ranges.
- Export the Locations, adding the default Community and Location.
- Import the Locations: the Community is then defined and assigned in the subscription.

8.3 CHANGING FROM A MULTI-SITE IN NORMAL MODE TO AN SDN MODE WITHOUT COMMUNITY

To change from normal multi-site mode to SDN mode without Community:

- Activate SDN mode.
- Import the numbering ranges.
- Import the configuration of Locations.
- Import the subscriber configuration: massive modification of subscribers in order to add the Location and fill in the plans in the chosen format (example: Plan 1 = 10 digits).



CAUTION: If there are subscriber profiles, it is necessary for each of them to assign a default Location.

8.4 MIGRATING FROM A SITE OR MULTI-SITE WITHOUT MIVOICE MANAGER TO A CONFIGURATION WITH MIVOICE MANAGER

The procedure is the same as described for adding a site in a Multi-site configuration with MiVoice 5000 Manager.

Refer to the MiVoice 5000 Manager User Guide on the Mitel.com Doccenter site.

9 SWITCHING FROM COMMUNITY MODE TO NO COMMUNITY MODE (WITH MIVOICE 5000 MANAGER)

- Select the multi-site.
- Click Configuration.
- Untick the Community mode box.
- Click Apply.

The following actions are taken during a return to no-Community mode:

- Deletion of locations
- Deletion of locations in the subscriptions
- Deletion of locations in the places
- Deletion of locations in the numbering ranges
- Deletion of locations in operator rights
- Deletion of the location column in the operation log
- Topology update
- Deletion of places
- Deletion of numbering ranges
- Deletion of places in the subscriptions

9.1 PRELIMINARY OPERATIONS REQUIRED ON AN ALREADY WORKING MULTI-SITE NETWORK

Before ticking the box **DID numbers managed by MiVoice 5000 Manager**, in Menu **Subscribers>Rights>General parameters, System tab**

For all the sites, disable the multi-directory function (for all subscribers).

10 APPENDICES

10.1 E164 NUMBERING FORMAT

10.1.1 GENERAL INFORMATION

The E164 format is a general national and international dialling format.

The syntax is as follows:

+ <country code> <space><national number>

or

+ <country code><national number>

Example:

+33 130964500 or +33130964500

10.1.2 CONFIGURATION OF PREFIXES

The configuration is multi-site based and must be made when DID numbers are managed in the directory characteristics.

The purpose of this configuration is for all the numbers published in the directory to be in E164 format. The prefixes allow numbers to be translated from national format to E164 format and vice versa. Example:

1309645000 (national format) to +33 130964200 (E164 format).

Configuration de la Numérotation E164	
- Transformation des Numéros	
Préfixe de Sortie	0
Préfixe International	00
Préfixe National	0
Code Pays	33
Préfixe Régional	
Préfixe Local	7
Longueur du Plan de Numération Interne	4
Annul	ler Appliquer



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