

MiVoice MX-ONE

Personal Number - Description

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General

This document describes the feature Personal Number (PN), which is a kind of call distribution list or profile which is individual per extension.

When the directory number is called and it has the PN service active, the call will be deflected, in series, to a number of answering positions defined in the active profile, until any of them answers the call or the call is stopped due to some other reason. Thus the function is rather similar to Diversion on no reply or Diversion on busy, and can be used as an alternative to the Diversion services.

Each personal number can have up to 10 profiles.

Each profile can have up to 10 answering positions. The answering positions can be defined by I/O commands.

The user can activate and deactivate the profile by dialing a procedure or using a CTI based application to change profile (personal preference). The activation/deactivation can also be done by the system administrator.

For Mitel 6900/6800/6700 SIP extensions as well as for DECT extensions, a 'default' Personal Number list can be defined, and used for a Diversion service.

If no profile is active (that is, the PN service is deactivated) and the directory number is called, the call will be forwarded to the affiliated terminal and the deflection is not executed.

It is possible for any valid type of extension to activate or change, with a dialing procedure, which profile number, 1 to 10, is the active one (even if it was initiated by I/O commands before). Normally the decision of what profile is going to be the active one will be taken depending on the user location (at the office, at home, and so on).

If the feature Personal number is available, the following extensions can use the service:

1. Analog extension
2. Digital extension
3. Cordless (DECT) extension
4. CAS extension
5. ISDN S0 extension
6. IP extension (both H.323 and SIP extension)
7. Remote extension
8. Virtual extension

Limitations

For valid personal number, see [Personal Number Extensions](#). For valid answering positions, see [Answering Positions](#).

When a call is deflected towards a personal number with Personal number service active, the Personal number service is not executed if the deflection is due to a CSTA service with maintained queue position

from an ACD queue position, or if it is deflected due to a previous Personal number distribution. In these cases, the call is distributed to the terminal assigned to the personal number.

Moreover, for validating an answering position, a TCD-category DAY check will be performed between the personal number and the answering position.

The “*default*” Personal Number list cannot be utilized by other extension types than Mitel 6700 SIP terminals.

Glossary

For a complete list of abbreviations and glossary, see the description for *Acronyms, Abbreviations And Glossary*.

Facilities

General

The Personal number service is designed to provide the user with up to 10 profiles, each one containing up to 10 possible answering positions.

The Personal number service has the following characteristics:

- Every personal number can have up to 10 different profiles that can be selected depending on the user's location (at the office, at home, and so on).
- The user can activate/deactivate the service or change the active profile via procedures, see [User Interface](#). This can also be done by I/O commands, see [Administration From I/O Terminal](#).
- When the Personal number service is activated, all incoming calls to the personal number are going to be deflected to the different positions in the active profile, until any of the programmed positions answers the call or the call is stopped due to any other reason.
- When the Personal number service is not activated, all incoming calls to the personal number are distributed to the assigned terminal as for a normal call.

Personal Number Extensions

Any extension type can use the Personal number service, regardless of the type of terminal assigned:

Generic	Cordless (DECT) extension
	IP extension
	Remote extension
	Virtual generic extension
Traditional	Analog extension (only Primary extension)
	Digital extension
	CAS extension
	ISDN S0 extension

Answering Positions

The answering positions to be included in the profiles can be:

- Analog extensions (Primary and Secondary extension)
- Remote extensions

- IP extensions
- A destination in the private network
- A destination in the public network
- An internal group hunting group
- A CTI group (that is, CSTA monitored ACD group without members)
- Individual PBX operators or PBX operator group
- A voice mail system
- Virtual generic extensions

If a personal number with the PN service active is defined as answering position, the Personal number service is not executed to the answering position, even if it is activated.

Priority of Personal Number

An order of priority is defined to execute the proper service when several services are activated for a personal number. Basically, the order of priority in which services (if they are activated) are executed is as follows for the entries (answering positions) in the Personal Number list:

- Message Diversion/External Follow me/Direct Diversion/Follow me/Message Diversion
- Personal Number service (also known as, Individual Repeated Distribution)
- Individual Do not Disturb
- Group Do not Disturb
- Diversion on Busy/Diversion on No Reply

NOTE: If even more services are involved, for example Multiple Terminal Services, the priority order may differ, so see also the descriptions for those services.

Call Distribution Criteria for the Answering Positions

Basically, the incoming calls to a personal number are distributed to the answering positions in the active profile following the order specified when the positions are initiated for that profile (see [Administration From I/O Terminal](#)).

There are three criteria that must be considered for each position in the profile, in the moment they are to be called (deflected-to):

- Depending on the calling party, three options are considered:
 - Internal and private
 - PBX operator
 - Public or unknown

NOTE: A destination can be marked at its initiation as not to be called if the calling party belongs to one of these types.

- The answering position can be initiated with the option not to be called more than once while the Personal number service distribution is going on. In this case, if one position has already been deflected-to, it is not called any more until the terminal is free.

There is another criterion to be considered. An answering position can be assigned to another answering position from the same profile which is called in case the latter is busy or is an internal extension having individual or group do not disturb active. In this case, all the intermediate positions between the assigning answering position and the assigned answering position are not considered in the current distribution.

Personal Number Service Execution

The Personal number service is initiated when a PN, which has the service activated, receives an incoming call. A standard call origin message is sent to the calling party and distribution of the call (using call deflection service) begins in the way described as follows:

- A call deflection is requested towards the first answering position in the active profile.
- Once the call has been deflected to an answering position, the Personal number service execution is: STOPPED, due to any of the following:
 - the call is cleared (for example, if the calling party clears the call).
 - the deflected-to party answers the call.
 - the deflected-to party is a group or an individual PBX operator. The supervision time is not considered.
 - the deflected-to party cannot give an answer indication (for example, some outgoing external lines). The supervision time is not considered.
 - the calling party receives a busy message if possible, when the deflected-to party is busy and there is no alternative position defined.
 - the deflected-to party is busy, and the alternative position defined for the current one indicates a stop to the Personal number service.
 - the calling party receives a no-progress message if possible, when the deflected-to party is an internal extension having individual or group do not disturb active and there is no alternative position defined.
 - the deflected-to party is an internal extension having individual or group do not disturb active, and the alternative position defined for the current one indicates a stop to the Personal number service.
 - other service (for example, Call back on no answer, Group call pick-up) has been initiated.
 - any of the cases described as follows take place when the deflected-to party is the last position in the active profile. A no progress message is sent to the calling party, in case no recall to PBX operator or rerouting is executed.

DISTRIBUTED TO THE NEXT POSITION IN THE ACTIVE PROFILE, due to any of the following:

- the ringing supervision time defined for the current position (see [Administration From I/O Terminal](#)) expires before the call is answered.
- the deflected-to party is busy or is an internal extension having individual or group do not disturb active, and there is an alternative position defined for the current one (see [Call Distribution Criteria for the Answering Positions](#) and [Administration From I/O Terminal](#)).
- the deflected-to party has activated any type of Diversion (except for Diversion on no answer) or Do not disturb (and no dnd option has been defined).
- the deflected-to party is an ACD group or a busy emergency extension. Note that CTI group is treated differently from ACD group, since the CTI group is allowed answering position.
- the deflected-to party is not available due to any other reason.

NOTE: In all of these cases, the current deflection is canceled and a new deflection is requested towards the next position in the active profile. The Personal number service proceeds to step 2.

- CSTA deflection request received during PN distribution (while the call is in a steady, ringing state) is executed. If the deflected-to party (deflected through CSTA) does not answer, the call is directed to the next answering position in the PN list.

Display Information for IP Extensions

This section is also valid for PBX operators as calling or connected (deflected-to) party.

Display Information for the Assigned Terminal

If any terminal is assigned and it is idle, the information shown in the display is the one corresponding to the active service with the highest priority, as explained (see [Priority of Personal Number](#)). The shown message depends on the type of terminal.

When personal number is the highest active service, then the number of the active profile will be shown on the display of the terminal when in idle state.

NOTE: If default personal number list has been configured, the assigned extension will not get any display information related to redirection, but shall have a Diversion key assigned. If any personal number list has been configured, the extension may get display information regarding redirection.

Display information for the calling party

The identity of the dialed party (that is, the PN number/name) will be presented to the calling party.

If the calling party is internal or within the private network (supporting the Personal Number service), it can receive information that the call is being deflected and information of the deflected-to party when:

- the deflected-to party is ringing
- the deflected-to party answers the call
- the deflected-to party is busy and a busy message is sent to the calling party
- the deflected-to party is an internal extension having individual or group do not disturb active and a no progress message is sent to the calling party

If the deflected-to destination is public, the identity of the deflected-to party is not presented to the calling party. If the destination is internal or private, the identity of the deflected-to party is presented to the calling party.

NOTE: If default personal number list or any personal number list, has been configured, the assigned extension will not get any display information related to redirection, if dialed and alerted number are the same.

Display Information for the Connected (Deflected-to) Party

If the deflected-to party is internal or within the private network, the calling number/name are presented to it.

If the deflected-to party is public, the identity of the PN is sent to the public network (or the Common Public directory number, if the PN does not belong to the public number series). If the Original A-number feature is used, the calling party's number will be sent to the public network. If the calling party's number is not obtainable, the PN identity will be sent.

If the deflected-to party is internal or within the private network (supporting the PN service), it can also receive information that the call has been deflected and the identity of the PN.

Display Information For Remote Extensions

Display Information for the Assigned Terminal

If any terminal is assigned and it is idle, the information shown in the display is the ordinary idle information.

Even if personal number is the highest active service, the number of the active profile will not be shown on the display of the terminal when in idle state.

Display Information for the Calling Party

The identity of the dialed party (that is, the PN number) will be presented to the calling party.

The identity of the deflected-to party (parties) is not presented to the calling party.

Display Information for the Connected (Deflected-to) Party

If the deflected-to party is a remote extension, the identity of the PN is sent to the remote extension (or the Common Public directory number, if the PN does not belong to the public number series).

If the Original A-number feature is used, the calling party's number will be sent to the remote extension. If the calling party's number is not obtainable, the PN identity will be sent.

User Interface

The procedures to activate a profile, change the active profile or deactivate the service, can be dialed from the extension's own telephone (which is the one with the terminal assigned), from the PBX operator or even from an external Remote extension user using the Individual Authorization Code.

The dialed procedures are different for each case as can be seen below.

The Mitel 6700 SIP terminals have a Diversion menu, which can also affect Personal Number

NOTE: If default personal number list has been configured, the assigned extension will not get any display information, and will not be allowed to use the procedures for activation/deactivation of personal number list.

Activation/Deactivation Procedure From an Extension

These procedures must be used to activate and deactivate the service from the terminal with the Personal number service initiated.

*FC*PROFILE#	To activate a specific profile
#FC#	To deactivate the Personal Number service

Where	
FC	Function Code for the Personal Number service
PROFILE	Specific profile number

Activation/Deactivation Procedure From a PBX Operator

These procedures are valid if the activation or the deactivation is entered from a PBX operator. The personal number must also be entered by the PBX operator.

*FC*PN*PROFILE#	To activate a specific profile
#FC*PN#	To deactivate the Personal Number service
Where	
FC	Function Code for the Personal Number service
PROFILE	Specific profile number
PN	Personal number with the service available

Administration From I/O Terminal

The personal number characteristics can be set, removed, changed and printed out by using I/O commands.

The active profile for a personal number can be activated/deactivated/changed and printed out by using I/O commands.

General

It is only possible to define a directory number as a personal number if it was defined as any other type of extension before.

Due to this, the initiation of the personal number characteristics is done in two different ways:

- Personal number with a Remote extension/IP terminal assigned:
 - Initiation of the Remote/IP extension using generic extension and remote extension/IP commands.
 - Initiation of the data for Personal number service using the `call_list` command.
- Personal number with a traditional terminal is assigned:
 - Initiation of an analog extension using EX commands.
 - Initiation of the data for Personal number service using the `call_list` command.

The way to initiate a personal number is by setting any of the answering positions of the profile number 1. After that, any position of any of the 10 profiles (which has not been initiated before) can be set in any order.

The Personal number service can be ended by removing all the data referred to the 10 profiles, using `call_list` command.

Personal Number Data Administration

At the initiation of a position for a personal number, the following data must be set by the I/O command:

- the own personal number
- the answering position
- the profile number
- priority of this position in the profile
- ringing time to call the answering position
- possibility of calling the position more than once
- alternative position to be called in case of busy
- alternative position to be called in case of individual or group do not disturb is active on an internal extension
- restriction of deflection requests depending on the originator

There are I/O commands to change any of the entered values, to get printouts of these values and to end a position.

There are also I/O commands to activate/deactivate, change and get a printout of the currently active profile.

Default Personal Number List Administration

For SIP extensions a “*default*” Personal Number list can be defined, and used for Diversion services, controlled via menu and key. The following data is an example of how to set the ‘default’ Personal Number data by I/O command:

- the own personal number (as first position in the list)
- the answering position (the diversion destination, as second position in the list)
- the profile number (usually only one)
- priority of the position in the profile
- ringing time to call the answering position
- display option in idle state for the owner of the PN list, and for calling party

It is also possible to set the other Personal Number options for the ‘default’ list, but these would normally not be set:

- possibility of calling the position more than once
- alternative position to be called in case of busy (e.g. Voice Mail or attendant number).
- alternative position to be called in case of individual or group do not disturb is active on an internal extension.
- restriction of deflection requests depending on the originator

The SIP extension that should have the default Personal Number list shall also have its service profile appropriately set. The service profile shall indicate that the PN list is not allowed to change.

NOTE: The “*default*” Personal Number list can be initiated for all extensions, but only Mitel 6900/6800/6700 SIP extensions can really utilize it as a Diversion service, with menu/key support.

There are I/O commands to change any of the entered values, to get printouts of these values and to end a position.

There are also I/O commands to activate/deactivate, change and get a printout of the currently active profile.

The end user cannot change or deactivate/remove the “*default*” list.

Other Administration

Personal Number Individual Authorization Code

Optionally, the personal number can be assigned an Individual Authorization Code in order to allow activation/deactivation of the Personal number service from external users (that is, from the public network). In this case, `auth_code` commands must be used.

Personal Number Service Information

It is possible to get information whether the Personal number service is active or not for a directory number and its active profile by using a System User command.

Hardware

No specific hardware is required for this facility.

Summary

It is possible to define the Personal number service to an extension depending on its type. The valid extensions are as follows

- Generic extensions as follows
 - Cordless (DECT) extension
 - IP extension
 - Remote extension
 - Virtual extension
- Analog extension
- Digital extension
- CAS extension
- ISDN S0 extension

A personal number is a directory number which uses the Personal number service.

Every personal number can use up to 10 profiles which each can have up to ten answering positions defined.

A “*default*” Personal Number list can be defined for Mitel 6900/6800/6700 SIP extensions, as well as for DECT extensions, and used for Diversion services.

The Personal number service can be activated by the user, or by the PBX operator remotely for an extension.

