

iPECS LIK Networking

(iPECS-LIKSW-TRA-01-007)

15 April 2013

REVISION HISTORY

ISSUE	DATE	DESCRIPTION OF CHANGES
1.0	15-April-13	Preliminary release

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Table of Contents




- Introduction
- Common program
- Example configurations
- Supported features

Networking

Introduction

 Voice networking package provides a way of communication to inter-work with networked system over Internet or ISDN.

Support standard protocol

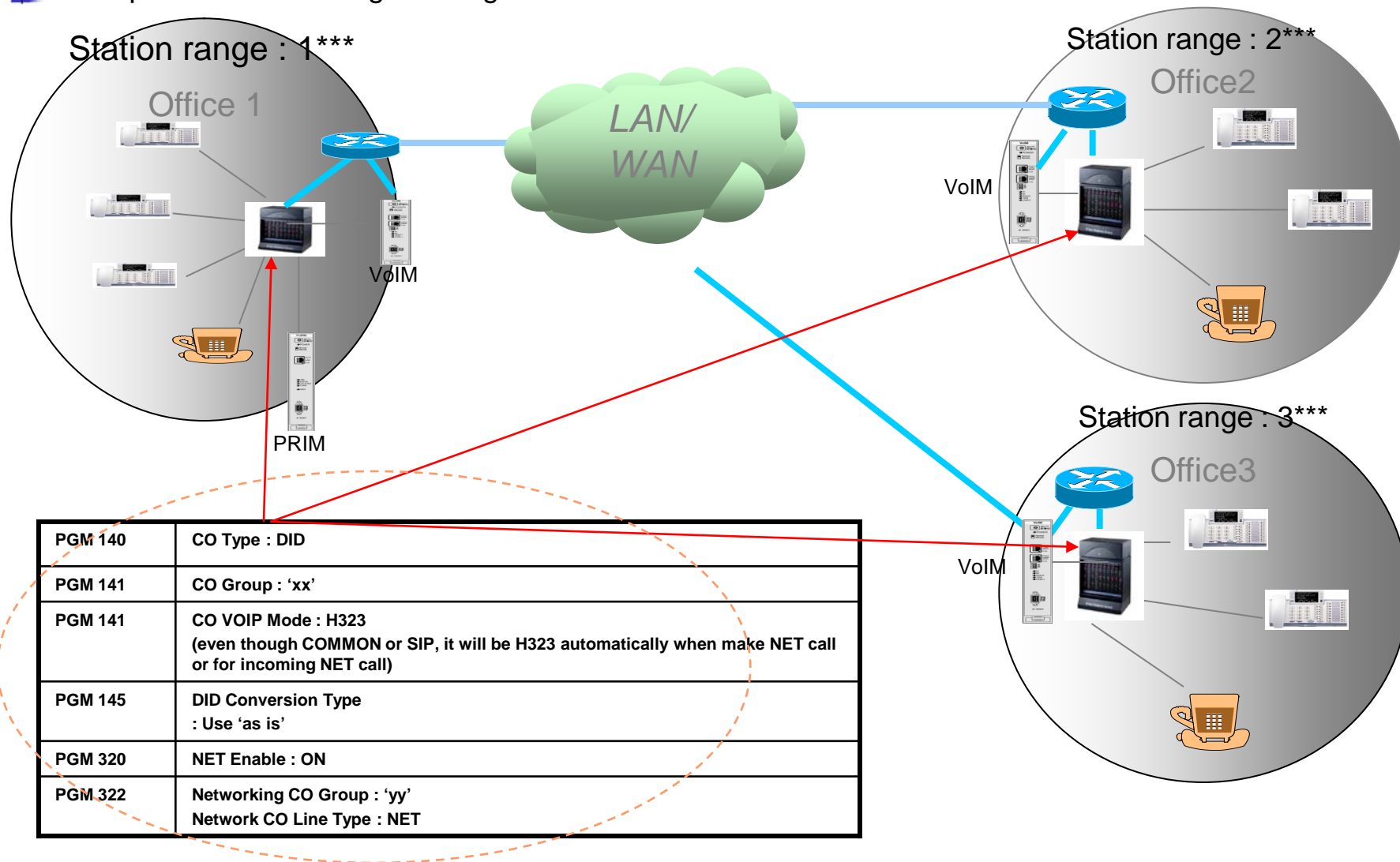
-  ETSI standards for QSIG interface over ISDN
-  ITU standards for H.450 interface over VoIP
-  LG proprietary protocol for enhanced features

Support unified numbering plan

-  Allow uniform numbering plan for all users in the network

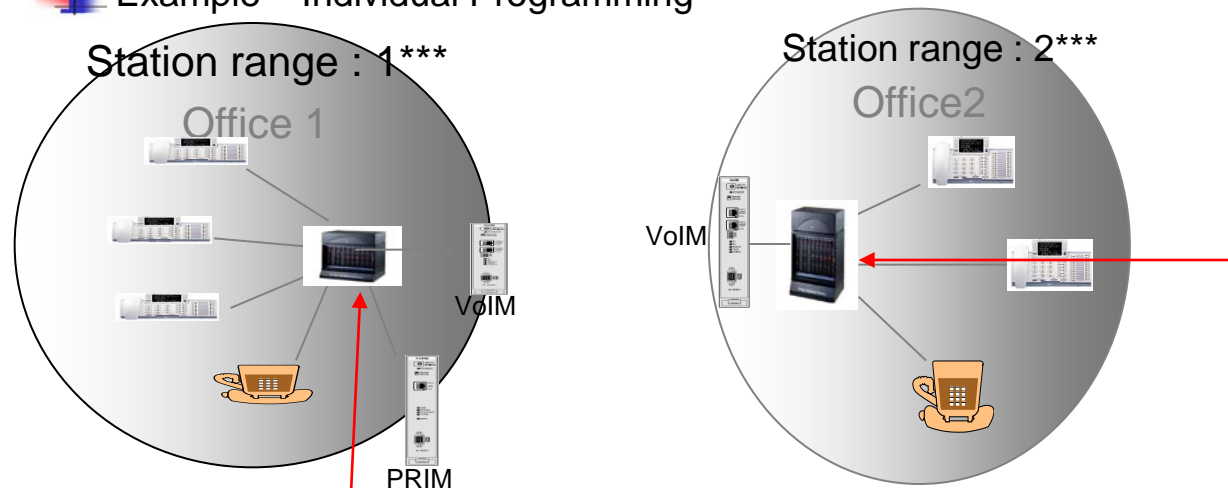
Networking (Common program)

Example - Common Programming



Networking (Common program)

 Example – Individual Programming



PGM 324 #00	System Usage : NET Numbering Plan Code : 1#*** Networking CO Group : 0
PGM 324 #01	System Usage : NET Numbering Plan Code : 2*** Networking CO Group : 'yy' CPN INFORMATION 1 : IP address of VoIM in Office2 MFIM(E) IP Address : IP address of MFIM in Office2 Firewall Routing : ON or OFF
PGM 324 #02	Numbering Plan Code : 3*** CPN INFORMATION 1 : IP address of VoIM in Office3 MFIM(E) IP Address : IP address of MFIM in Office3 <u>Others are Same as above #01</u>

PGM 324 #00	System Usage : NET Numbering Plan Code : 2#*** Networking CO Group : 0
PGM 324 #01	System Usage : NET Numbering Plan Code : 1*** Networking CO Group : 'yy' CPN INFORMATION 1 : IP address of VoIM in Office1 MFIM(E) IP Address : IP address of MFIM in Office1 Firewall Routing : ON or OFF
PGM 324 #02	Numbering Plan Code : 3*** CPN INFORMATION 1 : IP address of VoIM in Office3 MFIM(E) IP Address : IP address of MFIM in Office3 Others are Same as above #01

PGM 324 #00	System Usage : NET Numbering Plan Code : 3#*** Networking CO Group : 0
PGM 324 #01	System Usage : NET Numbering Plan Code : 1*** Networking CO Group : 'yy' CPN INFORMATION 1 : IP address of VoIM in Office1 MFIM(E) IP Address : IP address of MFIM in Office1 Firewall Routing : ON or OFF
PGM 324 #02	Numbering Plan Code : 2*** CPN INFORMATION 1 : IP address of VoIM in Office2 MFIM(E) IP Address : IP address of MFIM in Office2 Others are Same as above #01

Networking

Branch Zone 1 (MFIM using VoIP GW)

☞ Station Numbers : 1000 ~1099

☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.59.66
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.59.254
4 th (System Start IP)	: 10.11.10.10
5 th (System End IP)	: 10.11.10.254

Branch Zone 2 (MFIME using VoIP GW)

☞ Station Numbers : 2000 ~2099

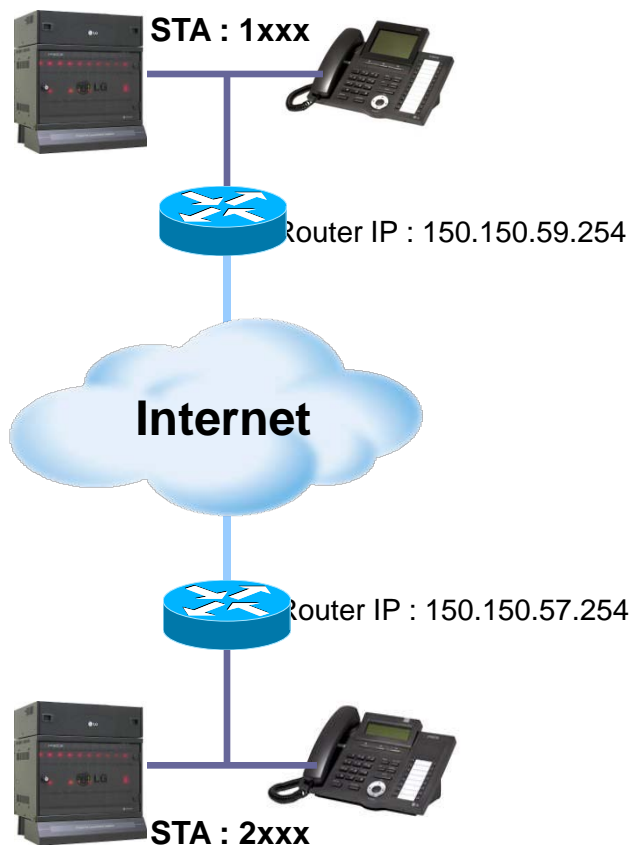
☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.57.116
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.57.254
4 th (System Start IP)	: 10.10.12.10
5 th (System End IP)	: 10.10.12.254

Example Configuration (1)

Zone 1: MFIM

VOIP Gateway : 150.150.59.66








Zone 2: MFIME

VOIP Gateway : 150.150.57.116

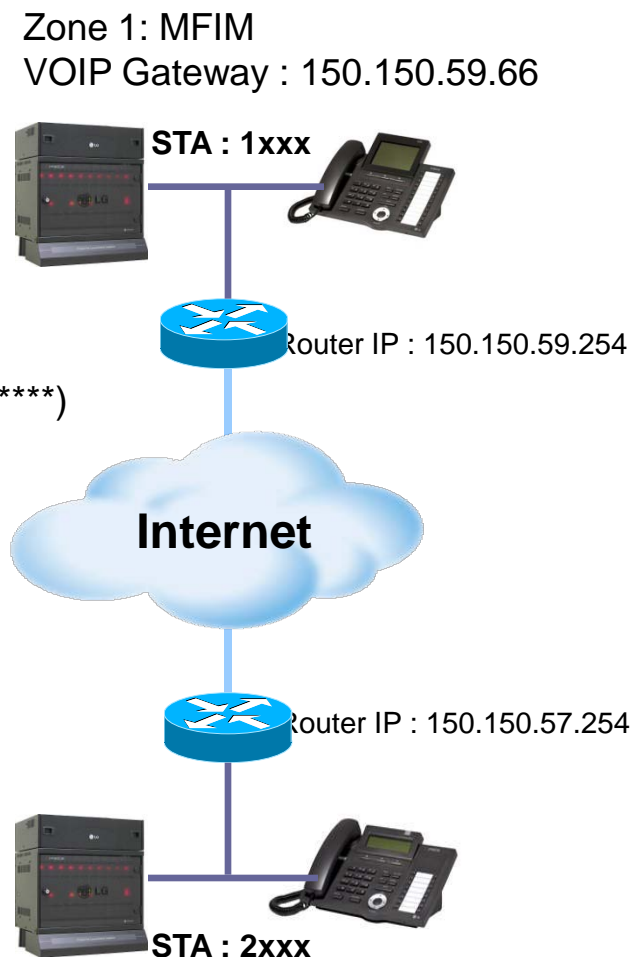
Networking

Example Configuration (1)

Programming at Branch Zone 1

-  **<PGM105>** station number range : 1000 ~1099
: [PGM] + 105 + [SPEED] + [SPEED] + 1000 + 1099 + [SAVE]
-  **<PGM140>** VOIP CO line 01~06 : **DID** type
: [PGM] + 140 + 01 + 06 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : **ON**
-  **<PGM322>** VOIP CO line **01~06** : net-group#(01), **NET**
: [PGM] + 322 + 01 + 06 + BTN1 + 01 + [SAVE]
: [PGM] + 322 + 01 + 06 + BTN4 + 1(**NET**) + [SAVE]

※ *NET means the CO lines are used as networking lines.*



Networking

Programming at Branch Zone 1

☞ **<PGM324> Table#(00) : NET , 1#***, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 1#* + [SAVE]**

※ 1#*** means the networking numbers are assigned from 1000 to 1999 which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

☞ **<PGM324> Table#(01) : NET , 2*** , 01, 150.150.57.116 , null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 2* + [SAVE]**

※ 2*** means the networking number are assigned from 2000 to 2999 which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

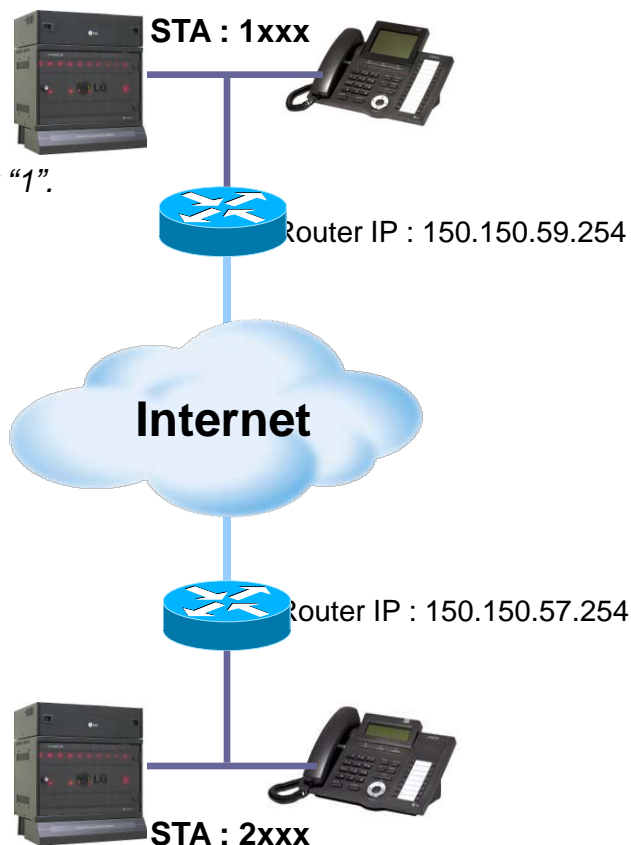
[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.116 + [SAVE]

※ 150.150.57.116 is the IP address of the other system.

Example Configuration (1)

Zone 1: MFIM

VOIP Gateway : 150.150.59.66








Zone 2: MFIME

VOIP Gateway : 150.150.57.116

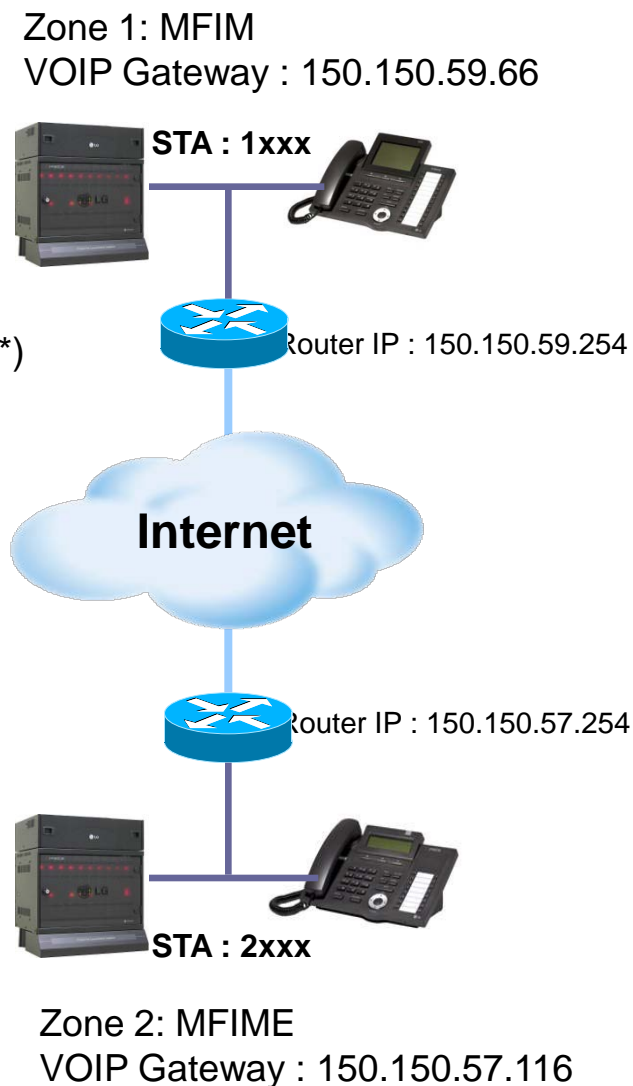
Networking

Example Configuration (1)

Programming at Branch Zone 2

-  **<PGM105>** station number range : 2000 ~2099
: [PGM] + 105 + [SPEED] + [SPEED] + 2000 + 2099 + [SAVE]
-  **<PGM140>** VOIP CO line 001~006 : **DID** type
: [PGM] + 140 + 001 + 006 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : **ON**
-  **<PGM322>** VOIP CO line 001~006 : net-group#(01), **NET**
: [PGM] + 322 + 001 + 006 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 001 + 006 + BTN4 + 1(**NET**) + [SAVE]

※ NET means the CO lines are used as networking lines.



Networking

Programming at Branch Zone 2

 **<PGM324> Table#(00) : NET , 2#***, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 2#* + [SAVE]**

※ 2#*** means the networking numbers are assigned from 2000 to 2999
which belong to branch zone 2's own local number by inserting “#” after “2”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 1***, 01, 150.150.59.66 ,
null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 1* + [SAVE]**

※ 1*** means the networking number are assigned from 1000 to 1999
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

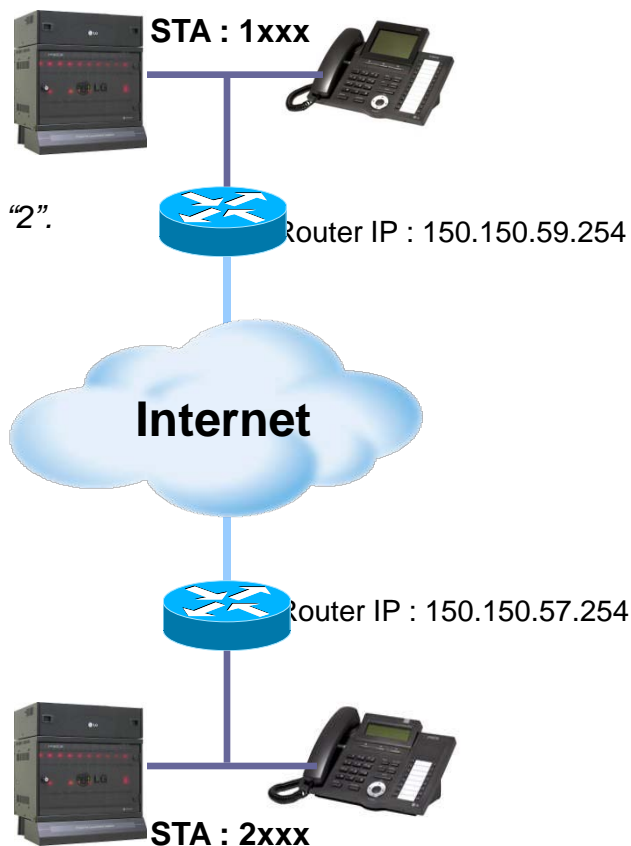
[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.59.66 + [SAVE]

※ 150.150.59.66 is the IP address of the other system.

Example Configuration (1)

Zone 1: MFIM

VOIP Gateway : 150.150.59.66



Zone 2: MFIME

VOIP Gateway : 150.150.57.116

Networking

Branch Zone 1 (MFIM using PRI GW)

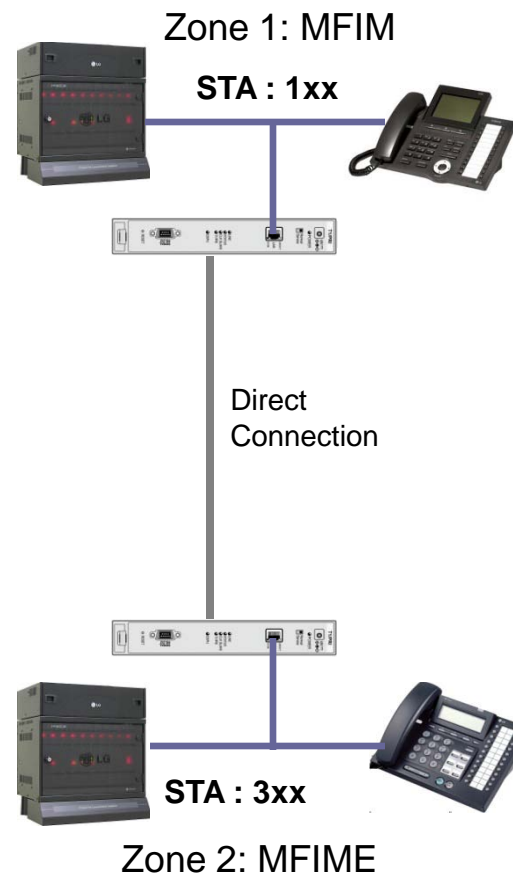
- ☞ Station Numbers : 100 ~199
- ☞ CO 07 to CO 29 for PRIM
- ☞ **<PGM131>** BTN3(PRI Line Mode) : **TE** mode

Branch Zone 2 (MFIME using PRI GW)

- ☞ Station Numbers : 300 ~399
- ☞ CO 007 to CO 029 for PRIM
- ☞ **<PGM131>** BTN3(PRI Line Mode) : **NT** mode

※ *PRI Line mode (NT/TE) PGM should be set when two LIK systems are connected directly.*

Example Configuration (2)



Networking

Example Configuration (2)

Programming at Branch Zone 1

☞ **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]

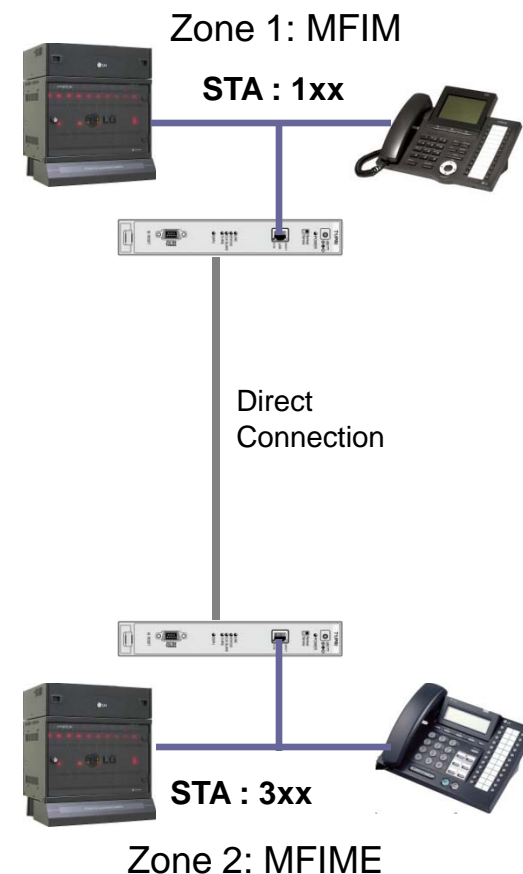
☞ **<PGM140>** VOIP CO line 07 ~ 29 : **DID** type
: [PGM] + 140 + 07 + 29 + 2 + [SAVE]

☞ **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

☞ **<PGM320>** BTN1(Networking Enable) : **ON**

☞ **<PGM322>** PRI CO line **07 ~ 29** : net-group#(02), **NET**
: [PGM] + 322 + 07 + 29 + BTN1 + 02 + [SAVE]
[PGM] + 322 + 07 + 29 + BTN4 + 1(NET) + [SAVE]

※ *NET means the CO lines are used as networking lines.*



Networking

Example Configuration (2)

Programming at Branch Zone 1

 **<PGM324> Table#(00) : NET , 1#**, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 1# + [SAVE]**

※ 1#** means the networking numbers are assigned from 100 to 199
which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 3** , 02, null,null,null, NO**

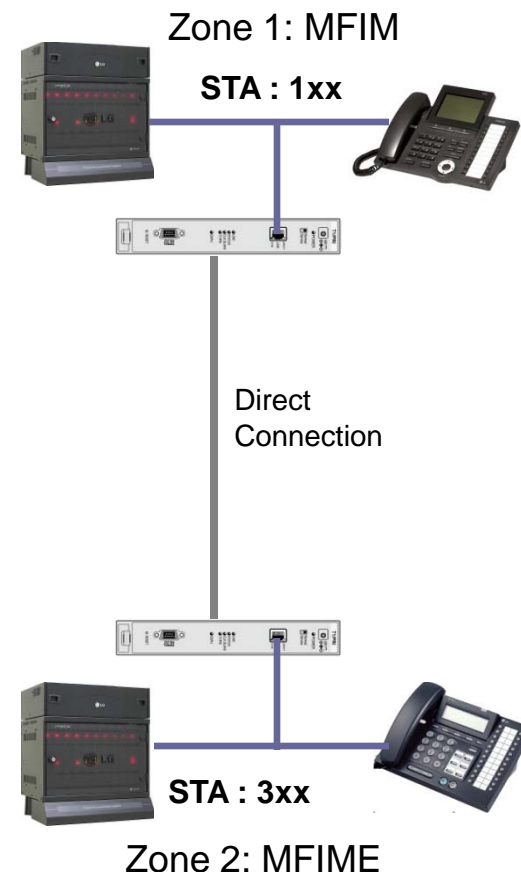
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 3 + [SAVE]**

※ 3** means the networking number are assigned from 300 to 399
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 02 + [SAVE]

※ 02 means the CO group for networking calls at PGM 322.



Networking

Example Configuration (2)

Programming at Branch Zone 2

☞ **<PGM105>** station number range : 300 ~399
: [PGM] + 105 + [SPEED] + [SPEED] + 300 + 399 + [SAVE]

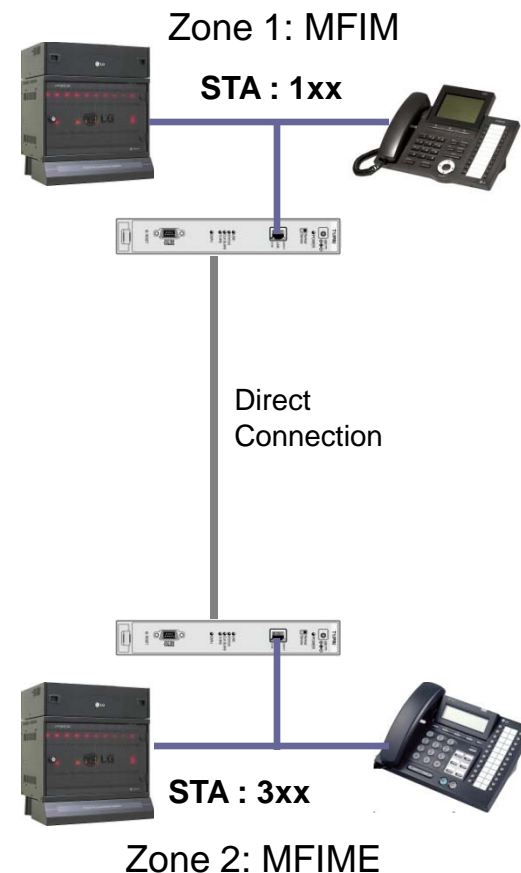
☞ **<PGM140>** VOIP CO line 007 ~ 029 : **DID** type
: [PGM] + 140 + 007 + 029 + 2 + [SAVE]

☞ **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

☞ **<PGM320>** BTN1(Networking Enable) : **ON**

☞ **<PGM322>** PRI CO line **007 ~ 029** : net-group#(02), **NET**
: [PGM] + 322 + 007 + 029 + BTN1 + 02 + [SAVE]
[PGM] + 322 + 007 + 029 + BTN4 + 1(NET) + [SAVE]

※ *NET means the CO lines are used as networking lines.*



Networking

Example Configuration (2)

Programming at Branch Zone 2

 **<PGM324> Table#(00) : NET , 3#**, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 3# + [SAVE]**

※ 3#** means the networking numbers are assigned from 300 to 399 which belong to branch zone 1's own local number by inserting “#” after “3”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 1** , 02, null,null,null, NO**

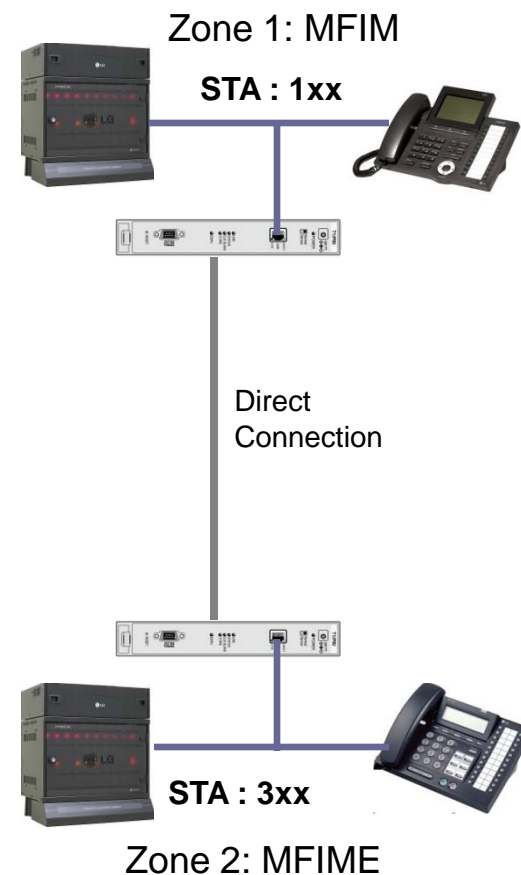
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 1 + [SAVE]**

※ 1** means the networking number are assigned from 100 to 199 which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 02 + [SAVE]

※ 02 means the CO group for networking calls at PGM 322.



Networking

Example Configuration (3)

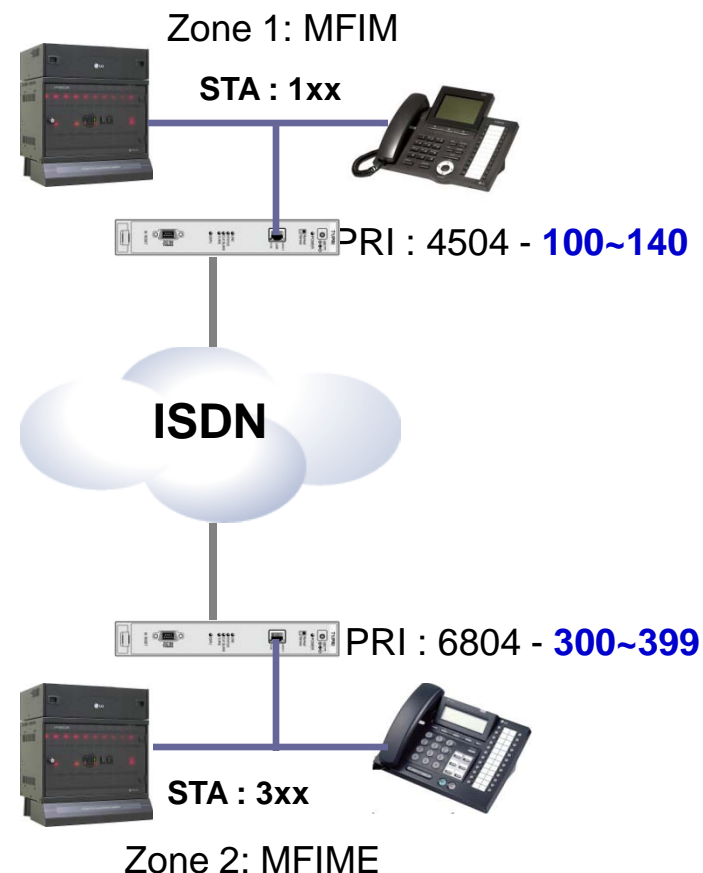
Branch Zone 1 (MFIM using PRI GW)

- ☞ Station Numbers : 100 ~199
- ☞ PRI DID Number : 450-4100 ~ 4140
- ☞ CO 07 to CO 29 for PRIM

Branch Zone 2 (MFIME using PRI GW)

- ☞ Station Numbers : 300 ~399
- ☞ PRI DID Number : 680-4300 ~ 4399
- ☞ CO 007 to CO 029 for PRIM


※ If the PRI GW is connected through public ISDN like left picture, Facility message should be supported and passed by Network.




Networking

Example Configuration (3)


Programming at Branch Zone 1

 **<PGM105>** station number range : 100 ~140
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 140 + [SAVE]

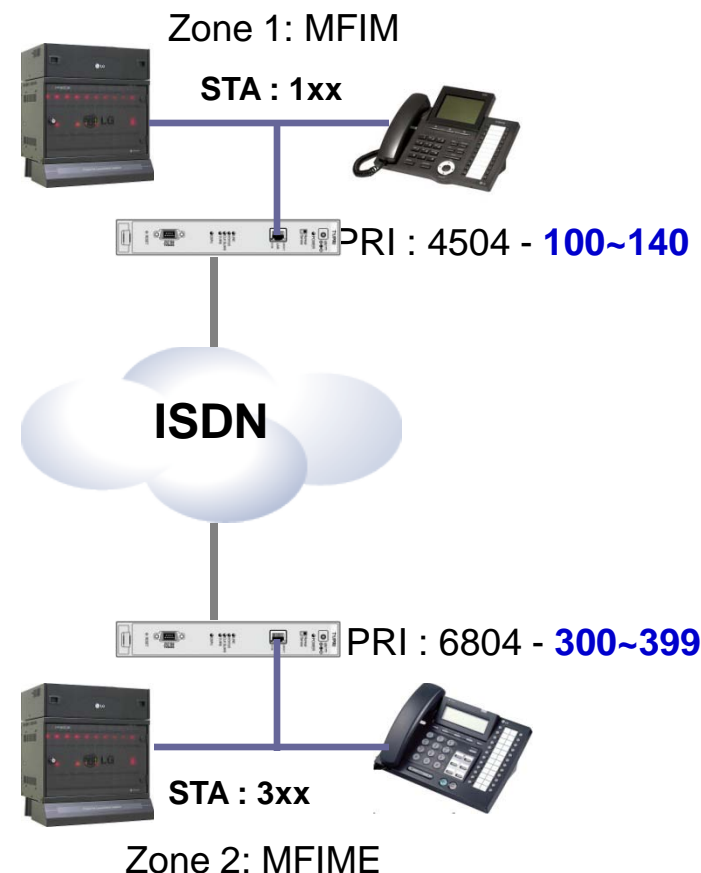
 **<PGM140>** VOIP CO line 07 ~ 29 : **DID** type
: [PGM] + 140 + 07 + 29 + 2 + [SAVE]

 **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

 **<PGM320>** BTN1(Networking Enable) : **ON**

 **<PGM322>** PRI CO line **07 ~ 29** : net-group#(02), **NET**
: [PGM] + 322 + 07 + 29 + BTN1 + 02 + [SAVE]
[PGM] + 322 + 07 + 29 + BTN4 + 1(**NET**) + [SAVE]

※ *NET* means the CO lines are used as networking lines.



Networking

Example Configuration (3)

Programming at Branch Zone 1

 **<PGM324> Table#(00) : NET , 1#** , 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 1# + [SAVE]**

※ 1#** means the networking numbers are assigned from 100 to 199 which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 3** , 02, 6804,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 3 + [SAVE]**

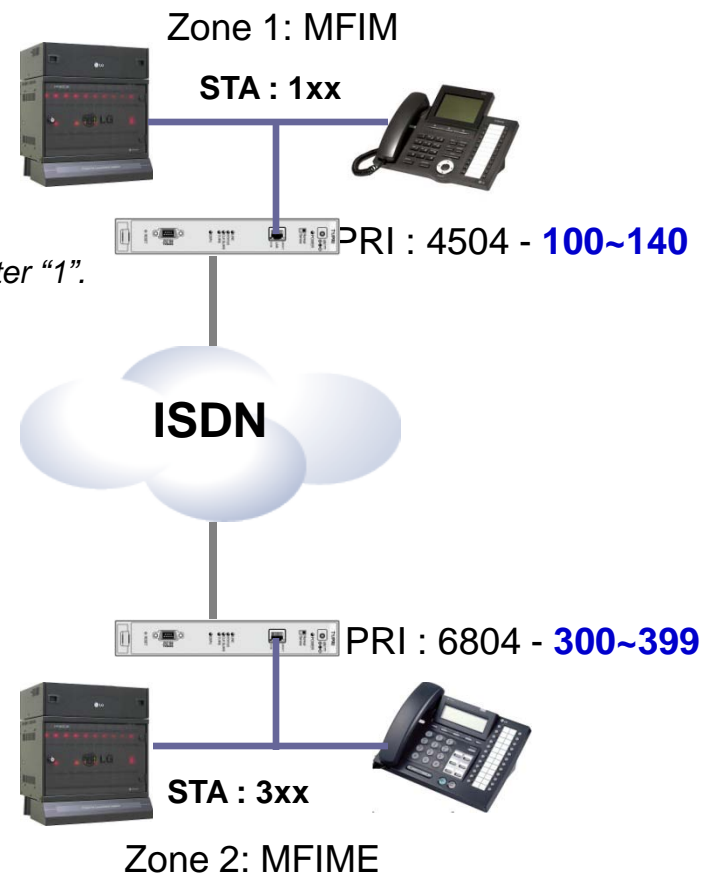
※ 3** means the networking number are assigned from 300 to 399 which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 02 + [SAVE]

※ 02 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + 6804 + [SAVE]


※ 6804 is the CPN number for the other system.




Networking

Example Configuration (3)


Programming at Branch Zone 2

 **<PGM105>** station number range : 300 ~399
: [PGM] + 105 + [SPEED] + [SPEED] + 300 + 399 + [SAVE]

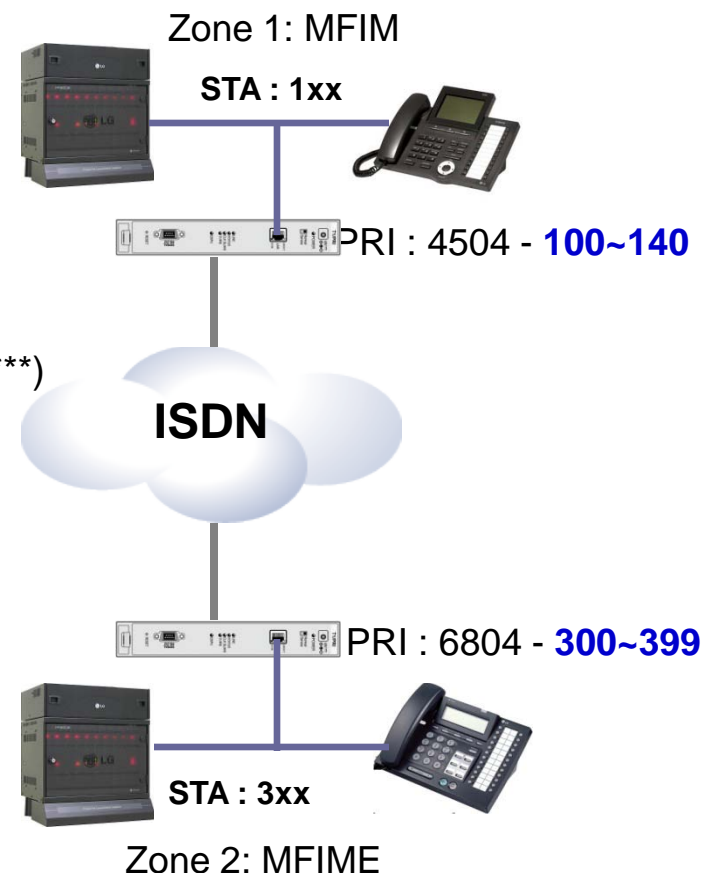
 **<PGM140>** VOIP CO line 007 ~ 029 : **DID** type
: [PGM] + 140 + 007 + 029 + 2 + [SAVE]

 **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

 **<PGM320>** BTN1(Networking Enable) : **ON**

 **<PGM322>** PRI CO line 007 ~ 029 : net-group#(02), **NET**
: [PGM] + 322 + 007 + 029 + BTN1 + 02 + [SAVE]
[PGM] + 322 + 007 + 029 + BTN4 + 1(**NET**) + [SAVE]

※ *NET means the CO lines are used as networking lines.*



Networking

Example Configuration (3)

Programming at Branch Zone 1

 **<PGM324> Table#(00) : NET , 3#** , 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 3# + [SAVE]**

※ 3#** means the networking numbers are assigned from 300 to 399
which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 1** , 02, 4504,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 1 + [SAVE]**

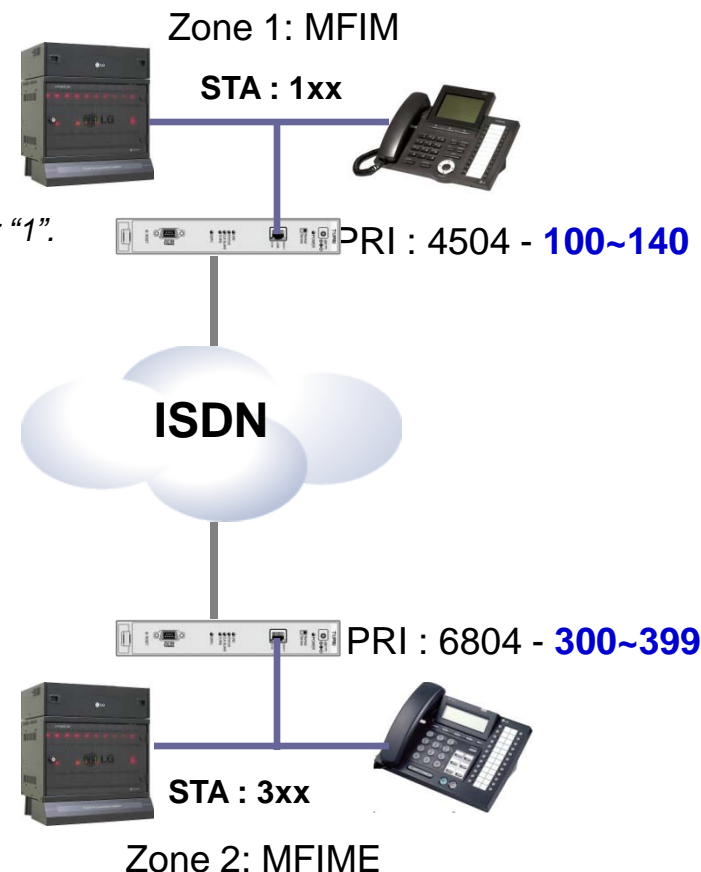
※ 1** means the networking number are assigned from 100 to 199
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 02 + [SAVE]

※ 02 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + 4504 + [SAVE]

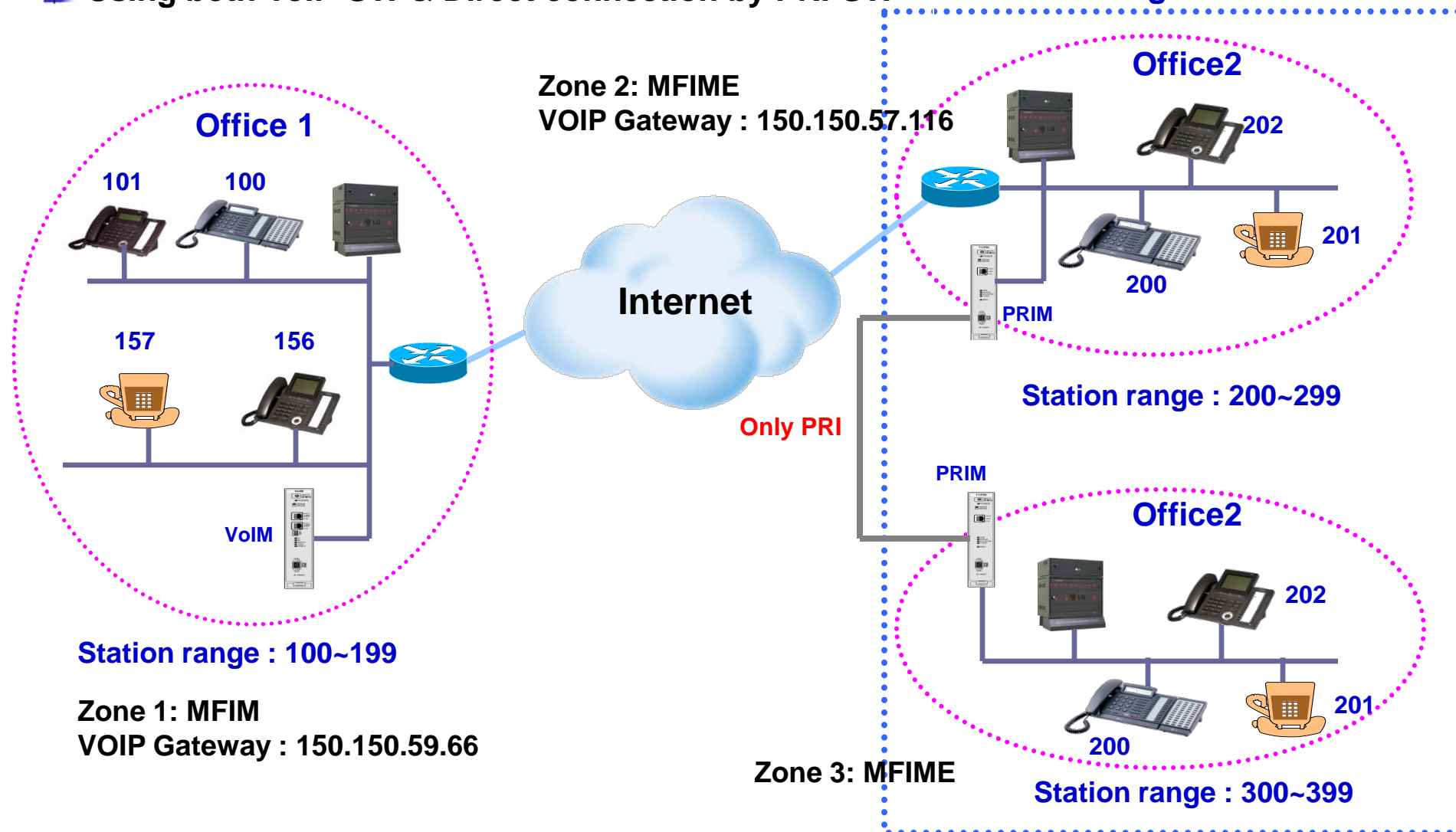
※ 4504 is the CPN number for the other system.



Networking

Example Configuration (4)

Using both VoIP GW & Direct connection by PRI GW



Networking

Example Configuration (4)

Branch Zone 1 (MFIM using VoIP GW)

☞ Station Numbers : 100 ~199

☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.59.66
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.59.254
4 th (System Start IP)	: 10.11.10.10
5 th (System End IP)	: 10.11.10.254
6 th (System Sub Net)	: 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

Branch Zone 2 (MFIME using VoIP & PRI GW)

☞ Station Numbers : 200 ~299

☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.57.116
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.57.254
4 th (System Start IP)	: 10.10.12.10
5 th (System End IP)	: 10.10.12.254
6 th (System Sub Net)	: 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

☞ CO 07 to CO 29 for PRIM

☞ **<PGM131>** BTN3(PRI Line Mode) : **TE** mode

Branch Zone 3 (MFIME using PRI GW)

☞ Station Numbers : 300 ~399

☞ CO 007 to CO 029 for PRIM

☞ **<PGM131>** BTN3(PRI Line Mode) : **NT** mode

Programming at Branch Zone 1

☞ **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]

☞ **<PGM140>** VOIP CO line 01~06 : **DID** type
: [PGM] + 140 + 01 + 06 + 2 + [SAVE]

☞ **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

☞ **<PGM320>** BTN1(Networking Enable) : **ON**

☞ **<PGM322>** VOIP CO line **01~06** : net-group#(01), **NET**
: [PGM] + 322 + 01 + 06 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 01 + 06 + BTN4 + 1(**NET**) + [SAVE]

※ *NET means the CO lines are used as networking lines.*

Programming at Branch Zone 1

 **<PGM324> Table#(00) : NET , 1#**, 00, null,null,null, NO**


: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 1# + [SAVE]**

※ 1#** means the networking numbers are assigned from 100 to 199
which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 2** , 01, 150.150.57.116 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 2 + [SAVE]**

※ 2** means the networking number are assigned from 200 to 299
which belong to the other systems.


[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.116 + [SAVE]

※ 150.150.57.116 is the IP address of the other system.

Programming at Branch Zone 1

 <PGM324> Table#(01) : NET , 3**, 01, 150.150.57.116 ,null,null, NO

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 3** + [SAVE]

※ 3** means the networking number are assigned from 300 to 399
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.116 + [SAVE]

※ 150.150.57.116 is the IP address of the other system.

Programming at Branch Zone 2

☞ **<PGM105>** station number range : 200 ~299
: [PGM] + 105 + [SPEED] + [SPEED] + 200 + 299 + [SAVE]

☞ **<PGM140>** VOIP CO line 001~006 : **DID** type
PRI CO line 007~029 : **DID** type
: [PGM] + 140 + 001 + 006 + 2 + [SAVE]
: [PGM] + 140 + 007 + 029 + 2 + [SAVE]

☞ **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

☞ **<PGM320>** BTN1(Networking Enable) : **ON**

☞ **<PGM322>** VOIP CO line 001~006 : net-group#(01), **NET**
PRI CO line 007~029 : net-group#(02), **NET**
: [PGM] + 322 + 001 + 006 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 001 + 006 + BTN4 + 1(NET) + [SAVE]

: [PGM] + 322 + 007 + 029 + BTN1 + 02 + [SAVE]
[PGM] + 322 + 007 + 029 + BTN4 + 1(NET) + [SAVE]

※ *NET means the CO lines are used as networking lines.*

Programming at Branch Zone 2

 **<PGM324> Table#(00) : NET , 2#**, 00, null,null,null, NO**


: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 2# + [SAVE]**

※ 2#** means the networking numbers are assigned from 200 to 299
which belong to branch zone 1's own local number by inserting “#” after “2”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 1** , 01, 150.150.59.70 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 1 + [SAVE]**

※ 1** means the networking number are assigned from 100 to 199
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.59.70 + [SAVE]

※ 150.150.59.70 is the IP address of the other system.


 **<PGM324> Table#(02) : NET , 3** , 02, null,null,null, NO**


: [PGM] + 324 + 02 + BTN 1 + 0 (NET) + [SAVE]


[PGM] + 324 + 02 + BTN 2 + 3 + [SAVE]**

[PGM] + 324 + 02 + BTN3 + 02 + [SAVE]

Programming at Branch Zone 3

 **<PGM324> Table#(00) : NET , 3#** , 00, null,null,null, NO**
: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 00 + BTN 2 + 3#** + [SAVE]
[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

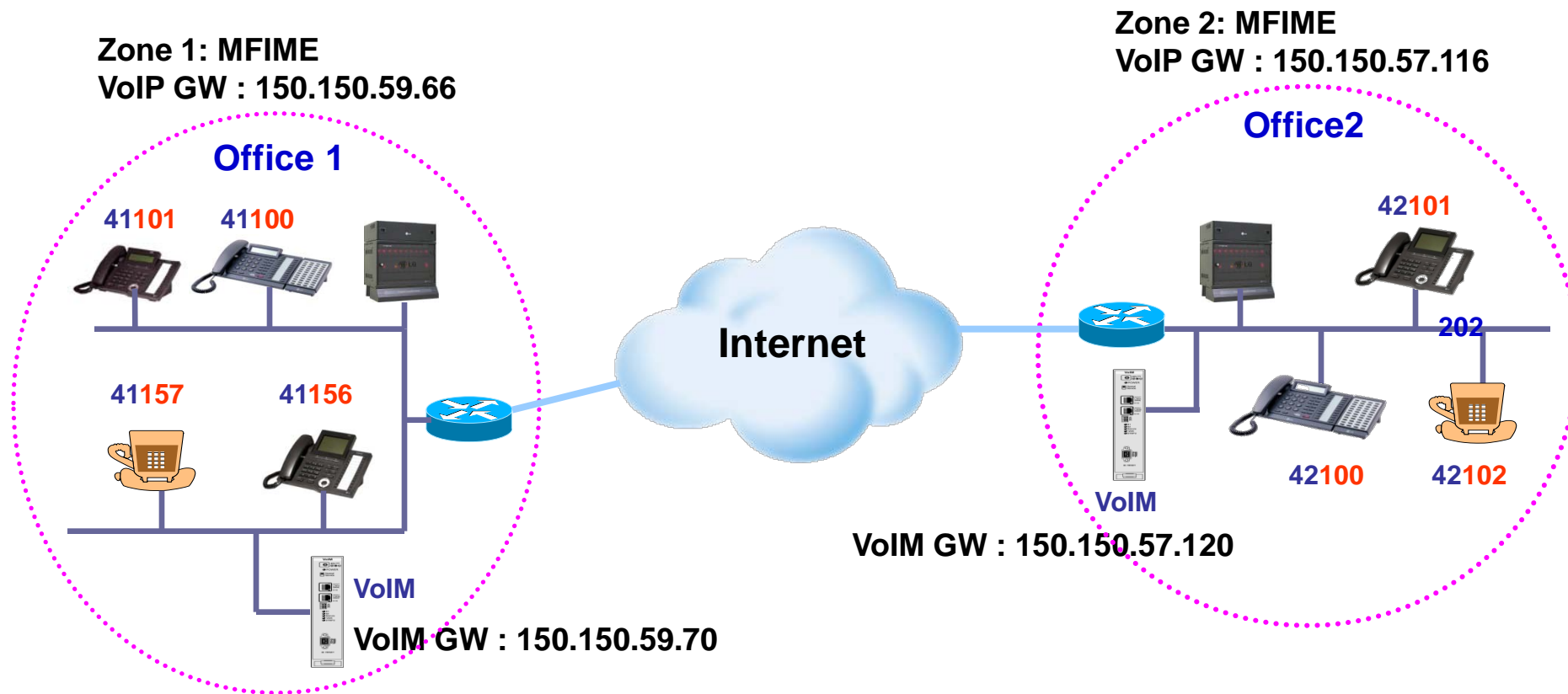
 **<PGM324> Table#(01) : NET , 1** , 01, null,null,null, NO**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 1** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

 **<PGM324> Table#(02) : NET , 2** , 02, null,null,null, NO**
: [PGM] + 324 + 02 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 02 + BTN 2 + 2** + [SAVE]
[PGM] + 324 + 02 + BTN3 + 02 + [SAVE]

Networking

Example Configuration (5)

Using VoIP GW



☞ Networking Station Num: 41100~41199 (41***)

☞ Local station number : 100 ~199

☞ Net Station Num : 42100~42199 (42***)

☞ Local station number : 100~199

Branch Zone 1 (MFIME using VoIM GW)

☞ Networking Station Numbers : 41100 ~41199

☞ Station Numbers : 100 ~ 199

☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.59.66
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.59.254
4 th (System Start IP)	: 10.11.10.10
5 th (System End IP)	: 10.11.10.254
6 th (System Sub Net)	: 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ <PGM103>

VoIM GW (IP Addr) : 150.150.59.70

Branch Zone 2 (MFIME using VoIM GW)

☞ Networking Station Numbers : 42100 ~42199

☞ Station Numbers : 100 ~ 199

☞ PGM 102,

1 st (H.323 IP Addr)	: 150.150.57.116
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.57.254
4 th (System Start IP)	: 10.10.12.10
5 th (System End IP)	: 10.10.12.254
6 th (System Sub Net)	: 255.255.255.0






☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ <PGM103>

VoIM GW (IP Addr) : 150.150.57.120

Programming at Branch Zone 1

-  **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]
-  **<PGM140>** VoIM CO line 007 ~ 030 : **DID** type
: [PGM] + 140 + 007 + 030 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + **BTN 3** + 4 + [SAVE] + **BTN 4** + **** + [SAVE]
-  **<PGM320>** **BTN1**(Networking Enable) : **ON**
-  **<PGM322>** VoIM CO line 007~030 : net-group#(**01**), **NET**
: [PGM] + 322 + 007 + 030 + **BTN1** + 01 + [SAVE]
[PGM] + 322 + 007 + 030 + **BTN4** + 1(**NET**) + [SAVE]

※ *NET means the CO lines are used as networking lines.*

Programming at Branch Zone 1


 **<PGM324> Table#(00) : NET , 41#***, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 41#* + [SAVE]**

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 42***, 01, 150.150.57.120 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 42* + [SAVE]**

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.120 + [SAVE]

※ 150.150.57.120 is the VoIM IP address of the other system.

Programming at Branch Zone 2

- ☞ **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]
- ☞ **<PGM140>** VoIM CO line 007 ~ 030 : **DID** type
: [PGM] + 140 + 007 + 030 + 2 + [SAVE]
- ☞ **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
- ☞ **<PGM320>** BTN1(Networking Enable) : **ON**
- ☞ **<PGM322>** VoIM CO line 007~030 : net-group#(01), **NET**
: [PGM] + 322 + 007 + 030 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 007 + 030 + BTN4 + 1(NET) + [SAVE]

※ *NET means the CO lines are used as networking lines.*

Programming at Branch Zone 2


 **<PGM324> Table#(00) : NET , 42#***, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 42#* + [SAVE]**

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 41***, 01, 150.150.59.70 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 41* + [SAVE]**

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

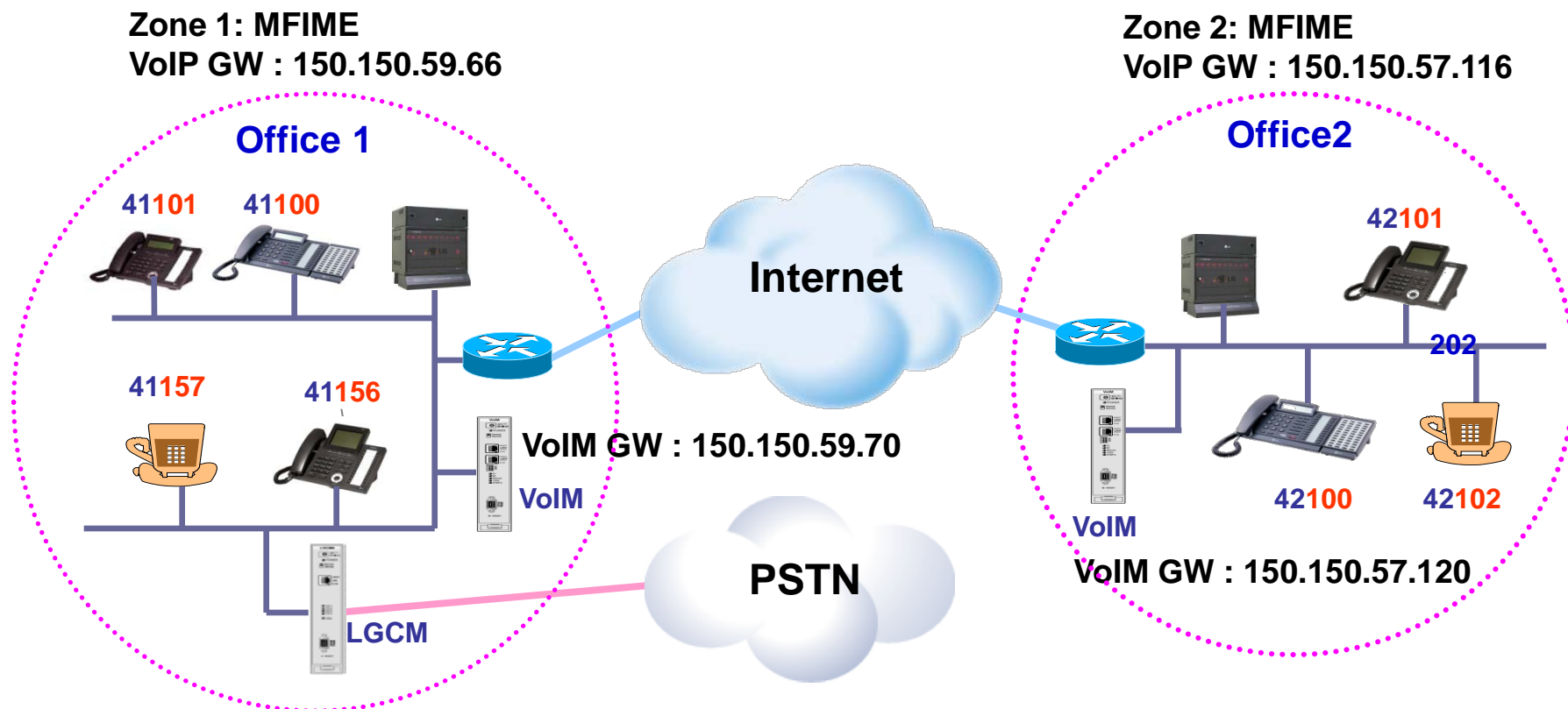
[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.70 + [SAVE]

※ 150.150.57.70 is the VoIM IP address of the other system.

Networking

Example Configuration (6)

- Using VoIP GW & CO line sharing
(The users in Office 2 can use LGCM CO line in Office 1)



- Networking Station Num: 41100~41199 (41***)
- Local station number : 100 ~199
- To seize LGCM line : “43”

- Networking Station Num: 42100~42199 (42***)
- Local station number : 100 ~199
- To seize LGCM line : “43”

Branch Zone 1 (MFIME using VoIM GW) **Branch Zone 2 (MFIME using VoIM GW)**

☞ Networking Station Numbers : 41100 ~41199

☞ Station Numbers : 100 ~199

☞ PGM 102,

1st (H.323 IP Addr) : 150.150.59.66
2nd (H.323 Sub Net) : 255.255.255.0
3rd (Router IP Addr) : 150.150.59.254
4th (System Start IP) : 10.11.10.10
5th (System End IP) : 10.11.10.254
6th (System Sub Net) : 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ CO 031 to CO 034 for LGCM GW

☞ **<PGM103>**

VoIM GW (IP Addr) : 150.150.59.70

☞ Networking Station Numbers : 42100 ~42199

☞ Station Numbers : 100 ~199

☞ PGM 102,

1st (H.323 IP Addr) : 150.150.57.116
2nd (H.323 Sub Net) : 255.255.255.0
3rd (Router IP Addr) : 150.150.57.254
4th (System Start IP) : 10.10.12.10
5th (System End IP) : 10.10.12.254
6th (System Sub Net) : 255.255.255.0






☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ **<PGM103>**

VoIM GW (IP Addr) : 150.150.57.120

Programming at Branch Zone 1

-  **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]
-  **<PGM140>** VoIM CO line 007 ~ 030 : **DID** type
: [PGM] + 140 + 007 + 030 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : **ON**
-  **<PGM322>** VoIM CO line 007~030 : net-group#(01), **NET**
LGCM CO line 031~034 : net-group#(24), **PSTN**
: [PGM] + 322 + 007 + 030 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 007 + 030 + BTN4 + 1(NET) + [SAVE]
※ NET means the CO lines are used as networking lines.
: [PGM] + 322 + 031 + 034 + BTN1 + 24 + [SAVE]
[PGM] + 322 + 031 + 034 + BTN4 + 0(PSTN) + [SAVE]
※ PSTN means the CO lines are used as normal CO lines.

Programming at Branch Zone 1


 **<PGM324> Table#(00) : NET , 411#** , 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 411# + [SAVE]**

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 421** , 01, 150.150.57.120 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 421 + [SAVE]**

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.120 + [SAVE]

※ 150.150.57.120 is the VoIM IP address of the other system.

 **<PGM324> Table#(02) : PSTN , 43, 24, null,null,null, NO**

: [PGM] + 324 + 02 + BTN 1 + 1 (PSTN) + [SAVE]

[PGM] + 324 + 02 + BTN 2 + 43 + [SAVE]

[PGM] + 324 + 02 + BTN3 + 24 + [SAVE]

※ 24 means the CO group for networking calls (CO sharing) at PGM 322.

Programming at Branch Zone 2

☞ **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]

☞ **<PGM140>** VoIM CO line 007 ~ 030 : **DID** type
: [PGM] + 140 + 007 + 030 + 2 + [SAVE]

☞ **<PGM145>** DID Receive Number, Digit Mask (3 digit, Mask : #***)
: [PGM] + 145 + BTN 3 + 3 + [SAVE] + BTN 4 + #*** + [SAVE]

☞ **<PGM320>** BTN1(Networking Enable) : **ON**

☞ **<PGM322>** VoIM CO line 007~030 : net-group#(01), **NET**
: [PGM] + 322 + 007 + 030 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 007 + 030 + BTN4 + 1(NET) + [SAVE]

※ *NET means the CO lines are used as networking lines.*

: [PGM] + 322 + 007 + 030 + BTN1 + 24 + [SAVE]
[PGM] + 322 + 007 + 030 + BTN4 + 1(NET) + [SAVE]

※ *These VoIM lines are used for sending CO line sharing request to the other system. So they need to be set as NET(1).*

Programming at Branch Zone 2

 **<PGM324> Table#(00) : NET , 421#**, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 421# + [SAVE]**

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

 **<PGM324> Table#(01) : NET , 411** , 01, 150.150.59.70 ,null,null, NO**

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 411 + [SAVE]**

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.59.70 + [SAVE]

※ 150.150.59.70 is the VoIM IP address of the other system.

 **<PGM324> Table#(02) : PSTN , 43, 24, null,null,null, NO**

: [PGM] + 324 + 02 + BTN 1 + 1 (PSTN) + [SAVE]

[PGM] + 324 + 02 + BTN 2 + 43 + [SAVE]

[PGM] + 324 + 02 + BTN3 + 24 + [SAVE]

[PGM] + 324 + 02 + BTN4 + BTN1 + 150.150.59.70 + [SAVE]

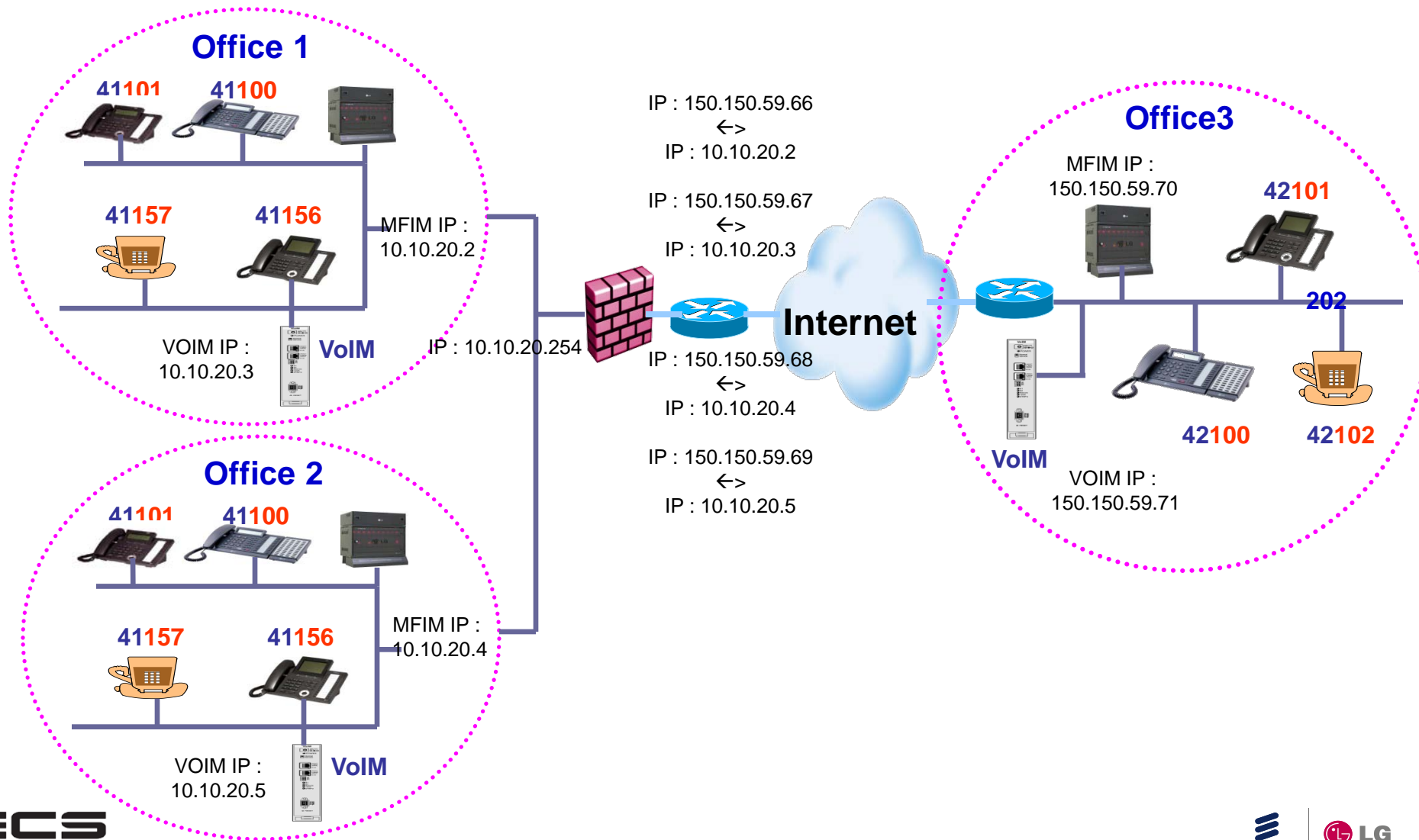
[PGM] + 324 + 02 + BTN7 + 1(DGT REPEAT) + [SAVE]

※ 24 means the CO group for networking calls (CO sharing) at PGM 322.

Networking

Example Configuration (7)

Using VoIP GW



Office 1 (MFIME using VoIM GW)

☞ Networking Station Numbers : 41100 ~41199

☞ Station Numbers : 100 ~ 199

☞ PGM 102,

1 st (H.323 IP Addr)	: 10.10.20.2
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 10.10.20.254
4 th (System Start IP)	: 10.11.10.10
5 th (System End IP)	: 10.11.10.254
6 th (System Sub Net)	: 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ <PGM103>

VoIM GW (IP Addr) : 10.10.20.3

Office 2 (MFIME using VoIM GW)

☞ Networking Station Numbers : 42100 ~42199

☞ Station Numbers : 100 ~ 199

☞ PGM 102,

1 st (H.323 IP Addr)	: 10.10.20.4
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 10.10.10.254
4 th (System Start IP)	: 10.10.12.10
5 th (System End IP)	: 10.10.12.254
6 th (System Sub Net)	: 255.255.255.0

☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ <PGM103>

VoIM GW (IP Addr) : 10.10.20.5

Office 3 (MFIME using VoIM GW)

☞ Networking Station Numbers : 43100 ~43199

☞ Station Numbers : 100 ~ 199

☞ PGM 102,

1st (H.323 IP Addr) : 150.150.59.70

2nd (H.323 Sub Net) : 255.255.255.0

3rd (Router IP Addr) : 150.150.59.254

4th (System Start IP) : 10.13.10.10

5th (System End IP) : 10.13.10.254

6th (System Sub Net) : 255.255.255.0






☞ CO 001 to CO 006 for VoIP GW

☞ CO 007 to CO 030 for VoIM GW

☞ <PGM103>


VoIM GW (IP Addr) : 150.150.59.71


Programming at Office 1 / 2 / 3


-  **<PGM105>** station number range : 100 ~199
: [PGM] + 105 + [SPEED] + [SPEED] + 100 + 199 + [SAVE]
-  **<PGM140>** VoIM CO line 007 ~ 030 : **DID** type
: [PGM] + 140 + 007 + 030 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : **ON**
-  **<PGM322>** VoIM CO line 007~030 : net-group#(01), **NET**
: [PGM] + 322 + 007 + 030 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 007 + 030 + BTN4 + 1(NET) + [SAVE]

※ NET means the CO lines are used as networking lines.


Programming at Office 1


 **<PGM324> Table#(00) : NET , 41#***, 00, null,null,null, NO, NO, ON, OFF**
: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 00 + BTN 2 + 41#*** + [SAVE]
[PGM] + 324 + 00 + BTN3 + 00 + [SAVE] ※ 00 means that no lines are seized for network call.
[PGM] + 324 + 01 + BTN11 + 0 + [SAVE] ※ Set up off fire wall routing


 **<PGM324> Table#(01) : NET , 42***, 01, 10.10.20.5 ,null,null, NO, NO, ON, OFF**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 42*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 10.10.20.5 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 0 + [SAVE] ※ Set up off fire wall routing

 **<PGM324> Table#(01) : NET , 43***, 01, 150.150.59.71 ,null,null, NO, NO, ON, ON**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 43*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.59.71 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 1 + [SAVE] ※ Set up on fire wall routing


Programming at Office 2


 **<PGM324> Table#(00) : NET , 42#***, 00, null,null,null, NO , NO, ON, OFF**
: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 00 + BTN 2 + 42#*** + [SAVE]
[PGM] + 324 + 00 + BTN3 + 00 + [SAVE] ※ 00 means that no lines are seized for network call.
[PGM] + 324 + 01 + BTN11 + 0 + [SAVE] ※ Set up off fire wall routing


 **<PGM324> Table#(01) : NET , 41***, 01, 10.10.20.3 ,null,null, NO , NO, ON, OFF**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 41*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 10.10.20.3 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 0 + [SAVE] ※ Set up off fire wall routing

 **<PGM324> Table#(01) : NET , 43***, 01, 150.150.59.71 ,null,null, NO , NO, ON, ON**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 43*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.59.71 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 1 + [SAVE] ※ Set up on fire wall routing

Programming at Office 3

 **<PGM324> Table#(00) : NET , 43#***, 00, null,null,null, NO , NO, ON, OFF**
: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 00 + BTN 2 + 43#*** + [SAVE]
[PGM] + 324 + 00 + BTN3 + 00 + [SAVE] ※ 00 means that no lines are seized for network call.
[PGM] + 324 + 01 + BTN11 + 0 + [SAVE] ※ Set up off fire wall routing

 **<PGM324> Table#(01) : NET , 41***, 01, 10.10.20.3 ,null,null, NO , NO, ON, ON**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 41*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 10.10.20.3 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 1 + [SAVE] ※ Set up on fire wall routing

 **<PGM324> Table#(01) : NET , 42***, 01, 10.10.20.5 ,null,null, NO , NO, ON, ON**
: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]
[PGM] + 324 + 01 + BTN 2 + 42*** + [SAVE]
[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]
[PGM] + 324 + 01 + BTN4 + BTN1+ 10.10.20.5 + [SAVE]
[PGM] + 324 + 01 + BTN11 + 1 + [SAVE] ※ Set up on fire wall routing

Networking

Example Configuration (7)

Network Paging Feature Example

☞ STA 1000 want to page to ZONE 2 MFIM system.

Net paging Caller party : STA1000

Net paging Called party : Internal Page zone1 of ZONE 2 MFIM

Network call admin is essential prerequisite.

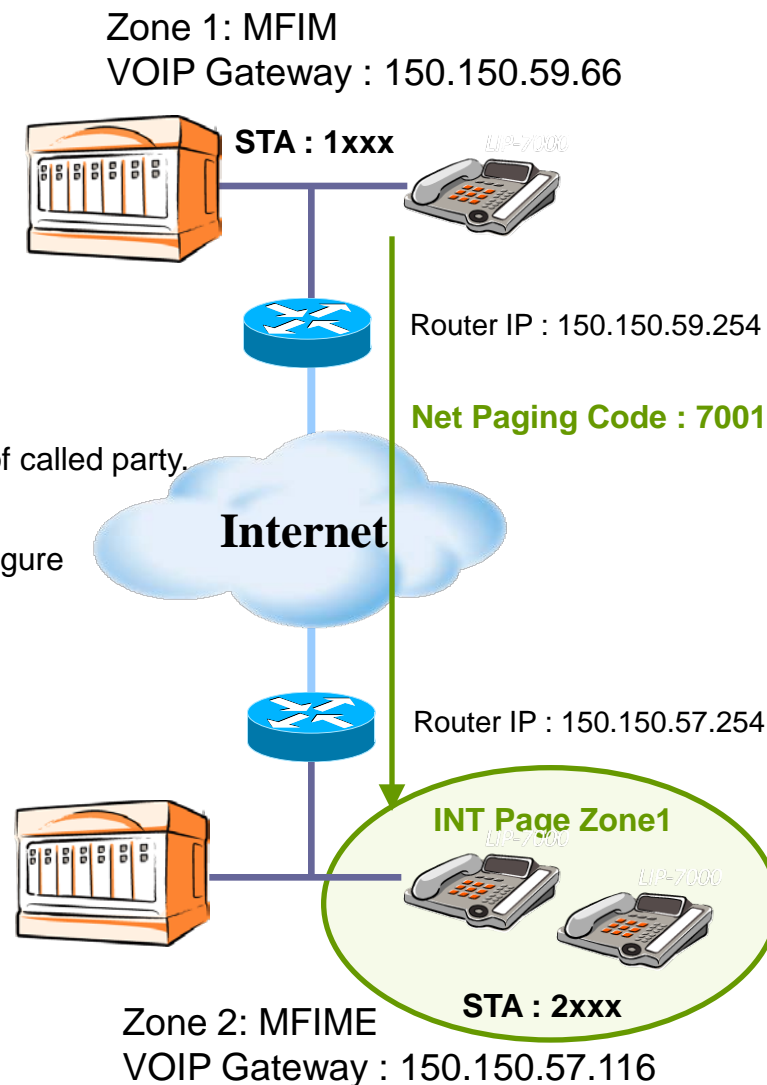
In addition to network call admin, PGM 325 admin is needed in case of called party.

Called party admin (Zone 2 MFIME)

- enter Network paging code and destination in PGM325 like below figure

[Network Feature Code Table]

Index	Net Feature Code	Type	Value
1	7001	Internal Page ▾	1
2		N/A ▾	



Networking

Example Configuration (8)

Branch Zone 1 (MFIM using VoIP GW)

☞ Station Numbers : 1000 ~1099

☞ PGM 102,

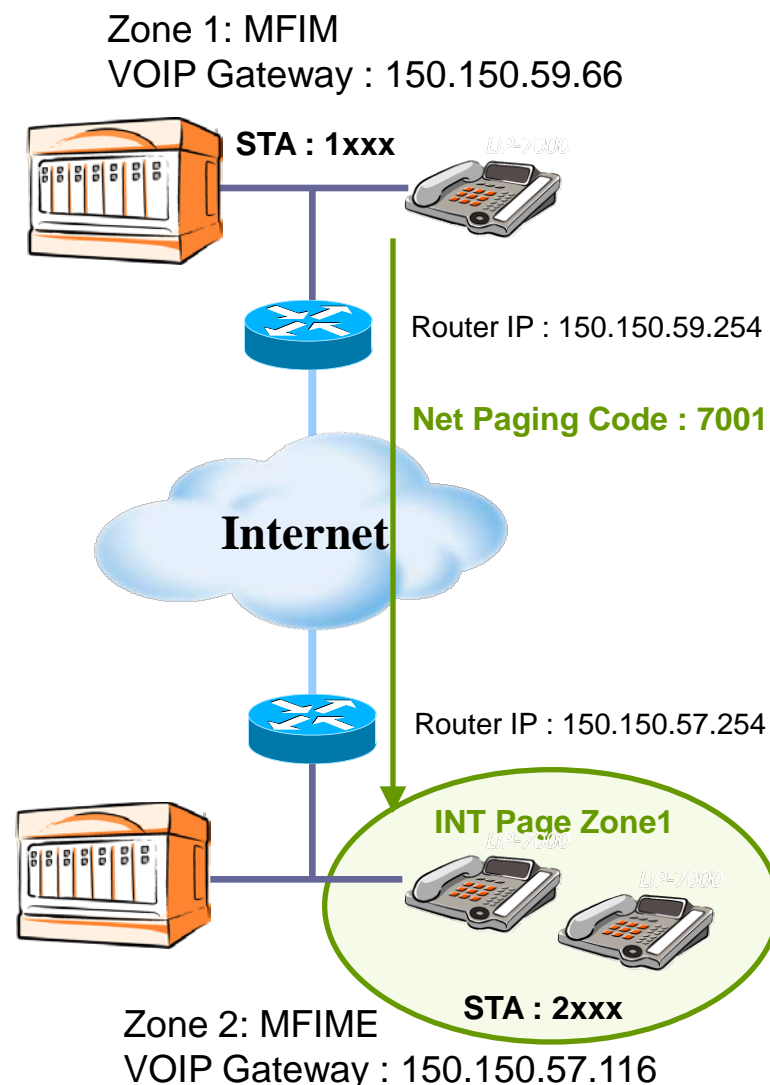
1 st (H.323 IP Addr)	: 150.150.59.66
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.59.254
4 th (System Start IP)	: 10.11.10.10
5 th (System End IP)	: 10.11.10.254

Branch Zone 2 (MFIME using VoIP GW)

☞ Station Numbers : 2000 ~2099

☞ PGM 102,






1 st (H.323 IP Addr)	: 150.150.57.116
2 nd (H.323 Sub Net)	: 255.255.255.0
3 rd (Router IP Addr)	: 150.150.57.254
4 th (System Start IP)	: 10.10.12.10
5 th (System End IP)	: 10.10.12.254



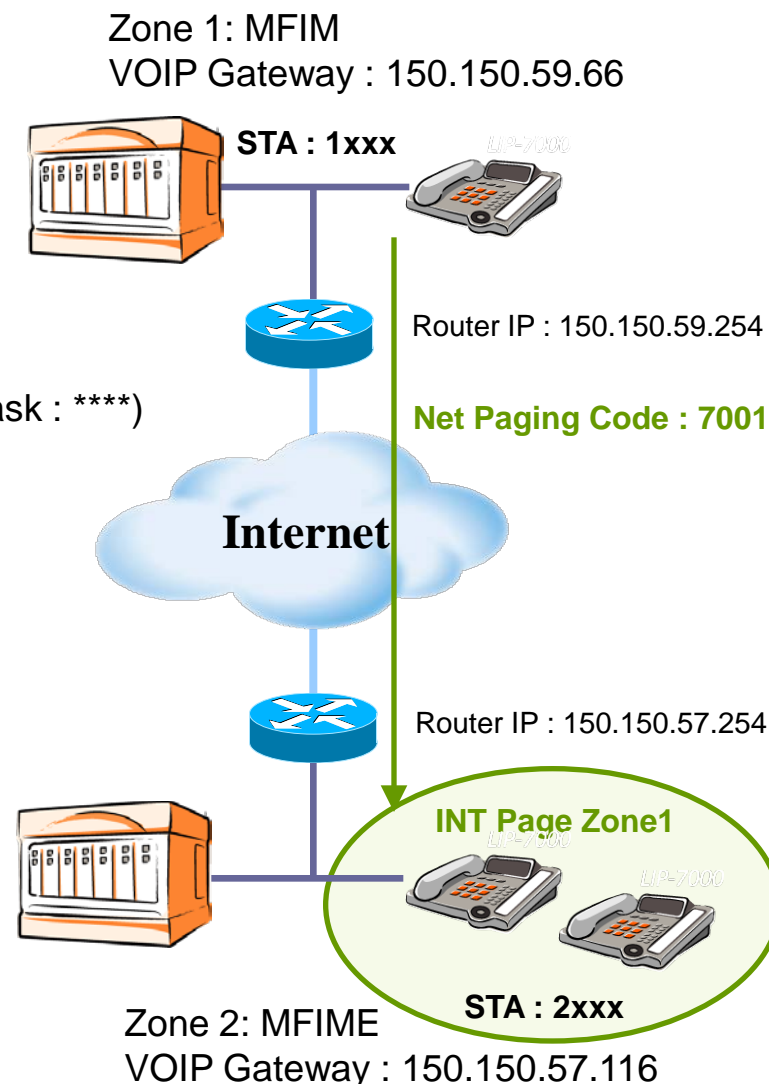
Networking

Example Configuration (8)

Programming at Branch Zone 1

-  **<PGM105>** station number range : 1000 ~1099
: [PGM] + 105 + [SPEED] + [SPEED] + 1000 + 1099 + [SAVE]
-  **<PGM140>** VOIP CO line 01~06 : DID type
: [PGM] + 140 + 01 + 06 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : ON
-  **<PGM322>** VOIP CO line 01~06 : net-group#(01), NET
: [PGM] + 322 + 01 + 06 + BTN1 + 01 + [SAVE]
[PGM] + 322 + 01 + 06 + BTN4 + 1(NET) + [SAVE]

※ NET means the CO lines are used as networking lines.



Networking

Example Configuration (8)

Programming at Branch Zone 1

<PGM324> Table#(00) : NET , 1#***, 00, null,null,null, NO

: [PGM] + 324 + 00 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN 2 + 1#*** + [SAVE]

※ 1#*** means the networking numbers are assigned from 1000 to 1999 which belong to branch zone 1's own local number by inserting “#” after “1”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

Networking Numbering Plan Table Index 0

Attribute	Value	Range
System Usage	NET	
Numbering Plan Code	1#***	Max 16 digits(include '*', '#').
Networking CO Group	0	0-24
CPN ISDN INFORMATION		Max 16 digits
CPN INFORMATION 1		Enter IP Address
CPN INFORMATION 2		Enter IP Address
CPN INFORMATION 3		Enter IP Address
CPN INFORMATION 4		Enter IP Address
ALT SPEED NUMBER		2000-7999
MFIM(E) IP Address		
MFIM(E) Port Number	5588	0-9999
Digit Repeat	No	
PSTN Enblock	No	
CO Attendant Code CLI	Off	
Firewall Routing	On	
Save		

Zone 1: MFIM

VOIP Gateway : 150.150.59.66



STA : 1xxx



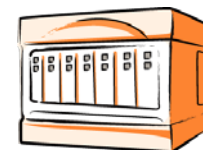
Router IP : 150.150.59.254



Net Paging Code : 7001



Router IP : 150.150.57.254



INT Page Zone1



STA : 2xxx

Zone 2: MFIME

VOIP Gateway : 150.150.57.116

Networking

Example Configuration (8)

Programming at Branch Zone 1

 <PGM324> Table#(01) : NET , 2*** , 01, 150.150.57.116
(For network call)

: [PGM] + 324 + 01 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN 2 + 2*** + [SAVE]

※ 2*** means the networking number are assigned from 2000 to 2999
which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

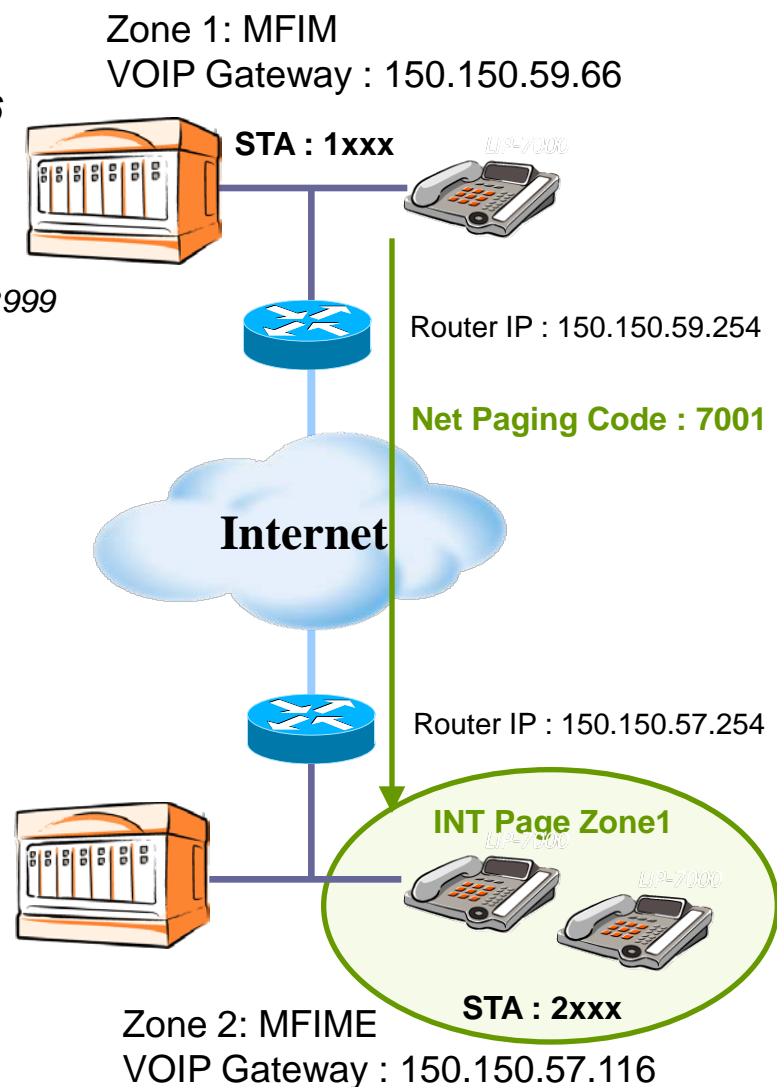
※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1+ 150.150.57.116 + [SAVE]

※ 150.150.57.116 is the IP address of the other system.

Networking Numbering Plan Table Index 1

Attribute	Value	Range
System Usage	NET	
Numbering Plan Code	2***	Max 16 digits(include '+', '#').
Networking CO Group	1	0-24
CPN ISDN INFORMATION		Max 16 digits
CPN INFORMATION 1	150.150.57.116	Enter IP Address
CPN INFORMATION 2		Enter IP Address
CPN INFORMATION 3		Enter IP Address
CPN INFORMATION 4		Enter IP Address
ALT SPEED NUMBER		2000-7999
MFIM(E) IP Address		
MFIM(E) Port Number	5588	0-9999
Digit Repeat	No	
PSTN Enblock	No	
CO Attendant Code CLI	Off	
Firewall Routing	On	
Save		



Networking

Example Configuration (8)

Programming at Branch Zone 1

<PGM324> Table#(02) : NET , 700* , 01, 150.150.57.116
(For network paging call)

: [PGM] + 324 + 02 + BTN 1 + 0 (NET) + [SAVE]

[PGM] + 324 + 02 + BTN 2 + 700* + [SAVE]

※ 700* means the network paging code are assigned from 7001 to 7009
 which belong to the other systems.

[PGM] + 324 + 02 + BTN3 + 01 + [SAVE]

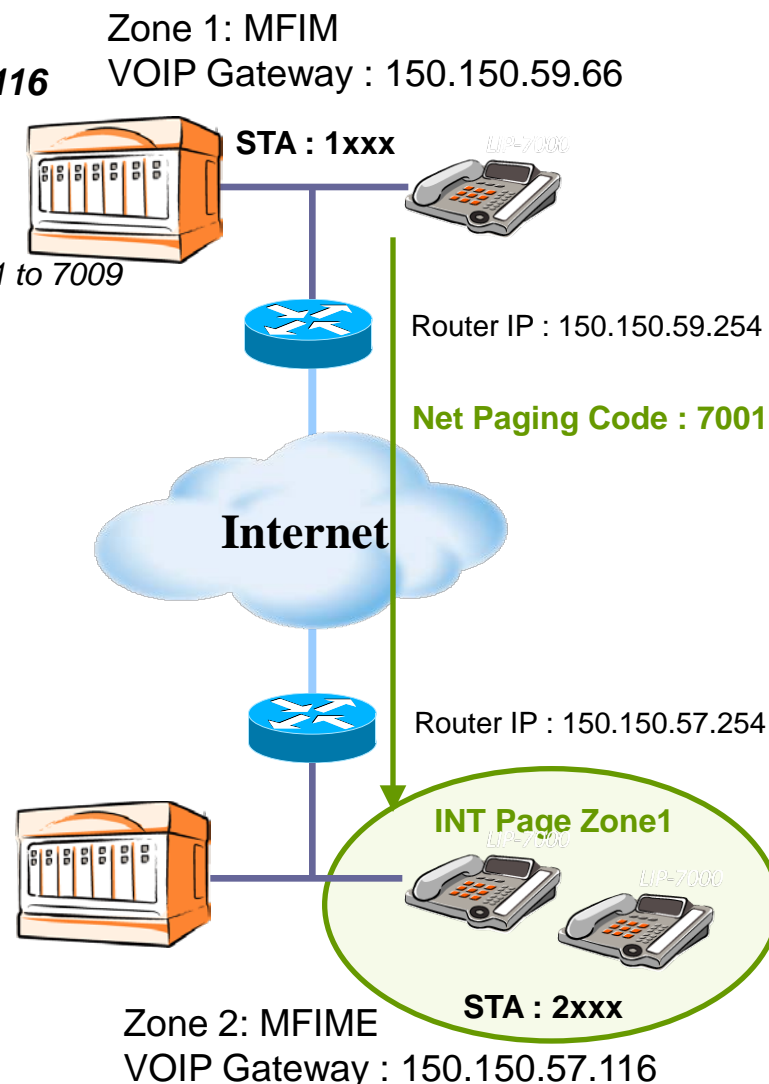
※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 02 + BTN4 + BTN1+ 150.150.57.116 + [SAVE]

※ 150.150.57.116 is the IP address of the other system.

Networking Numbering Plan Table Index 2






Attribute	Value	Range
System Usage	NET	
Numbering Plan Code	700*	Max 16 digits(include '*', '#').
Networking CO Group	1	0-24
CPN ISDN INFORMATION		Max 16 digits
CPN INFORMATION 1	150.150.57.116	Enter IP Address
CPN INFORMATION 2		Enter IP Address
CPN INFORMATION 3		Enter IP Address
CPN INFORMATION 4		Enter IP Address
ALT SPEED NUMBER		2000-7999
MFIM(E) IP Address		
MFIM(E) Port Number	5588	0-9999
Digit Repeat	No	
PSTN Enblock	No	
CO Attendant Code CLI	Off	
Firewall Routing	On	
Save		



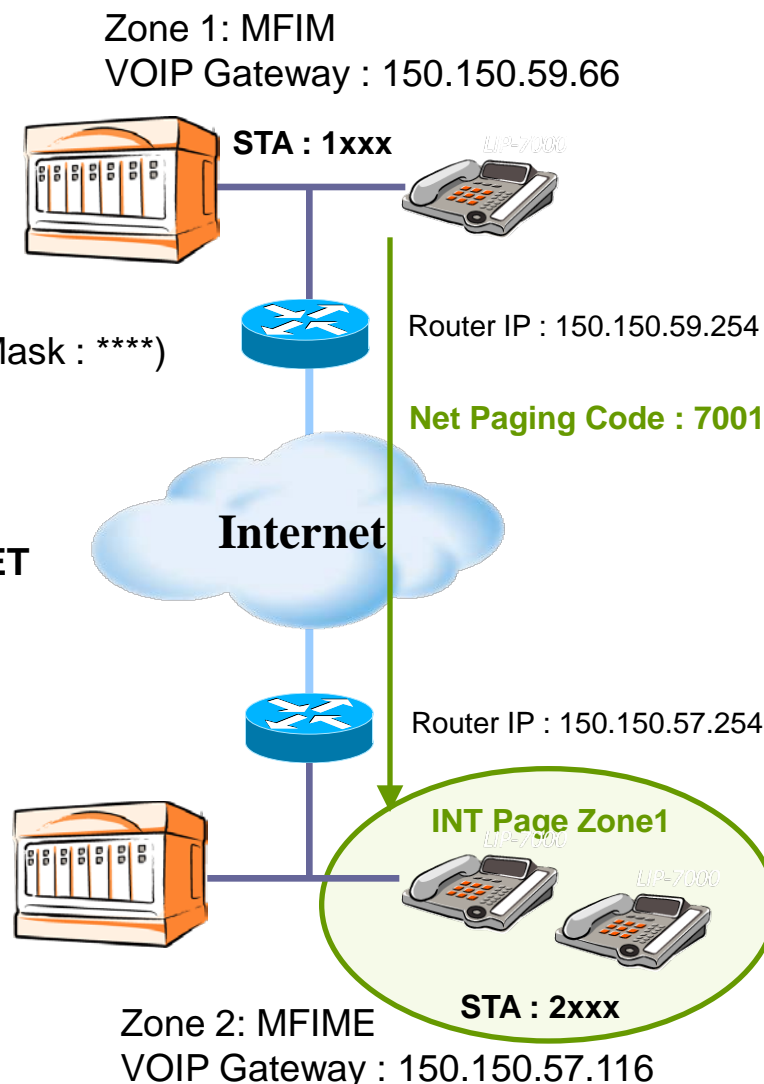
Networking

Example Configuration (8)

Programming at Branch Zone 2

-  **<PGM105>** station number range : 2000 ~2099
: [PGM] + 105 + [SPEED] + [SPEED] + 2000 + 2099 + [SAVE]
-  **<PGM140>** VOIP CO line 001~006 : **DID** type
: [PGM] + 140 + 001 + 006 + 2 + [SAVE]
-  **<PGM145>** DID Receive Number, Digit Mask (4 digit, Mask : ****)
: [PGM] + 145 + BTN 3 + 4 + [SAVE] + BTN 4 + **** + [SAVE]
-  **<PGM320>** BTN1(Networking Enable) : **ON**
-  **<PGM322>** VOIP CO line 001~006 : net-group#(01), **NET**
: [PGM] + 322 + 001 + 006 + BTN1 + 01 + [SAVE]
: [PGM] + 322 + 001 + 006 + BTN4 + 1(**NET**) + [SAVE]

※ NET means the CO lines are used as networking lines.



Networking

Example Configuration (8)

Programming at Branch Zone 2

<PGM324> Table#(00) : NET , 2#*, 00, null,null,null, NO**

: [PGM] + 324 + 00 + BTN1 + 0 (NET) + [SAVE]

[PGM] + 324 + 00 + BTN2 + 2#* + [SAVE]**

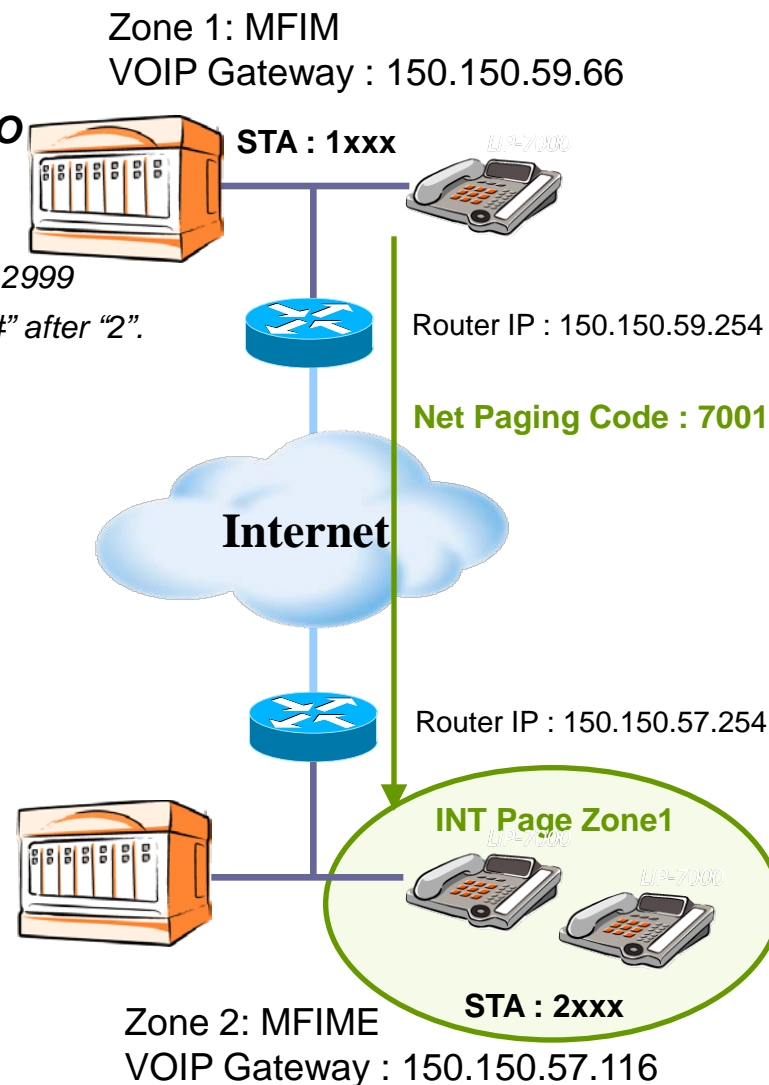
※ 2#*** means the networking numbers are assigned from 2000 to 2999
which belong to branch zone 2's own local number by inserting “#” after “2”.

[PGM] + 324 + 00 + BTN3 + 00 + [SAVE]

※ 00 means that no lines are seized for network call.

Networking Numbering Plan Table Index 0

Attribute	Value	Range
System Usage	NET	
Numbering Plan Code	2#***	Max 16 digits(include '*', '#').
Networking CO Group	0	0-24
CPN ISDN INFORMATION		Max 16 digits
CPN INFORMATION 1		Enter IP Address
CPN INFORMATION 2		Enter IP Address
CPN INFORMATION 3		Enter IP Address
CPN INFORMATION 4		Enter IP Address
ALT SPEED NUMBER		2000-7999
MFIM(E) IP Address		
MFIM(E) Port Number	5588	0-9999
Digit Repeat	No	
PSTN Enblock	No	
CO Attendant Code CLI	Off	
Firewall Routing	On	
Save		



Networking

Example Configuration (8)



Programming at Branch Zone 2

<PGM324> Table#(01) : NET , 1* , 01, 150.150.59.66**
(For network call)

: [PGM] + 324 + 01 + BTN1 + 0 (NET) + [SAVE]

[PGM] + 324 + 01 + BTN2 + 1* + [SAVE]**

※ 1*** means the networking number are assigned from 1000 to 1999
 which belong to the other systems.

[PGM] + 324 + 01 + BTN3 + 01 + [SAVE]

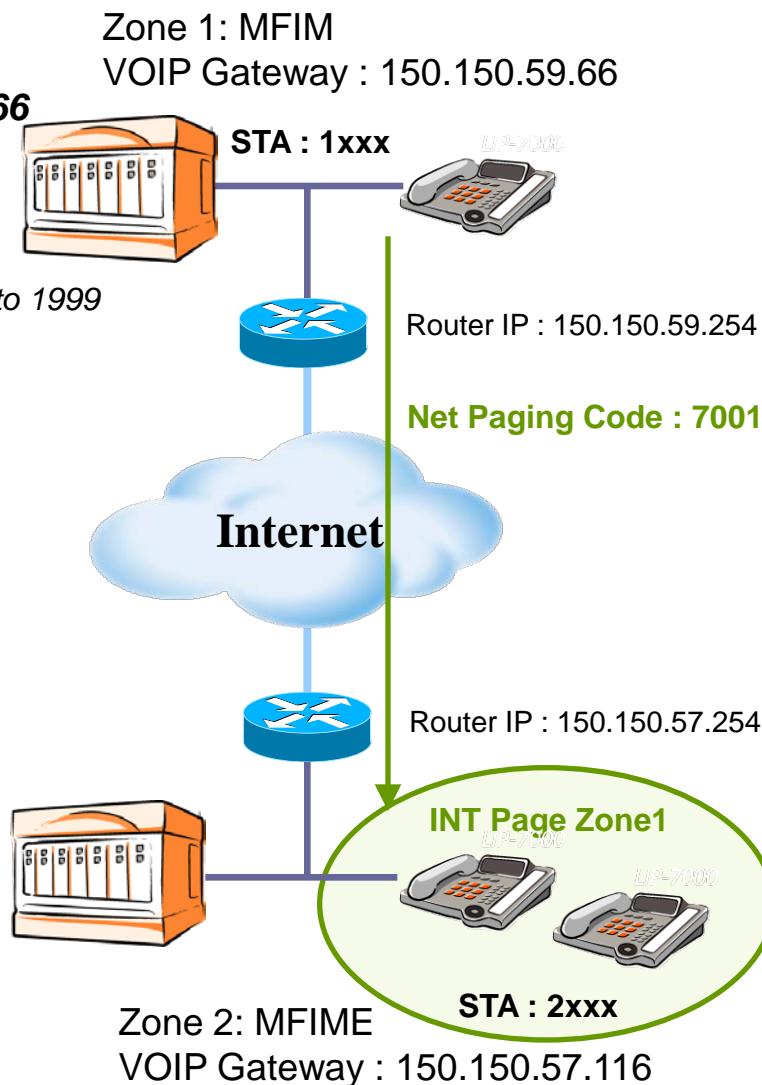
※ 01 means the CO group for networking calls at PGM 322.

[PGM] + 324 + 01 + BTN4 + BTN1 + 150.150.59.66 + [SAVE]

※ 150.150.59.66 is the IP address of the other system.

Networking Numbering Plan Table Index 1

Attribute	Value	Range
System Usage	NET	
Numbering Plan Code	1***	Max 16 digits(include '*', '#').
Networking CO Group	1	0-24
CPN ISDN INFORMATION		Max 16 digits
CPN INFORMATION 1	150.150.59.66	Enter IP Address
CPN INFORMATION 2		Enter IP Address
CPN INFORMATION 3		Enter IP Address
CPN INFORMATION 4		Enter IP Address
ALT SPEED NUMBER		2000-7999
MFIM(E) IP Address		
MFIM(E) Port Number	5588	0-9999
Digit Repeat	No	
PSTN Enblock	No	
CO Attendant Code CLI	Off	
Firewall Routing	On	
Save		



Networking

Example Configuration (8)

Programming at Branch Zone 2

<PGM325> Table#(01) : 7001 , INT PAGE 01
(For network paging call)

: [PGM] + 325 + 01 + BTN1 + 7001 + [SAVE]

※ 7001 means network paging code

[PGM] + 325 + 01 + BTN2 + 1 + 01 + [SAVE]

※ 1 means Internal Page type

cf, 2 means External Page type, 3 means All call Page type

※ 01 means number of page zone

cf, Internal Page num range : MFIM100 : 1~10, MFIM300/MFIM600 : 1~35,

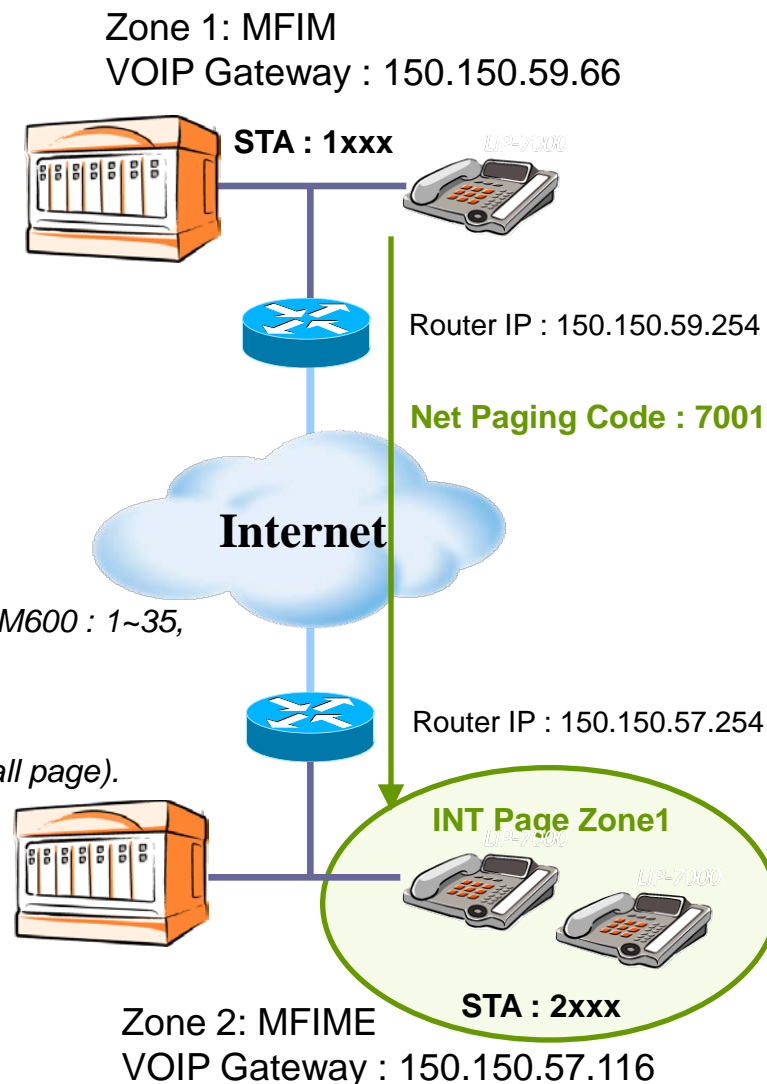
External Page num range : 1~2,

All Call Page num range : 1~3

i.e 1(Internal All call page), 2(External All call page), 3(All call page).

[Network Feature Code Table]

Index	Net Feature Code	Type	Value
1	7001	Internal Page	1
2		N/A	

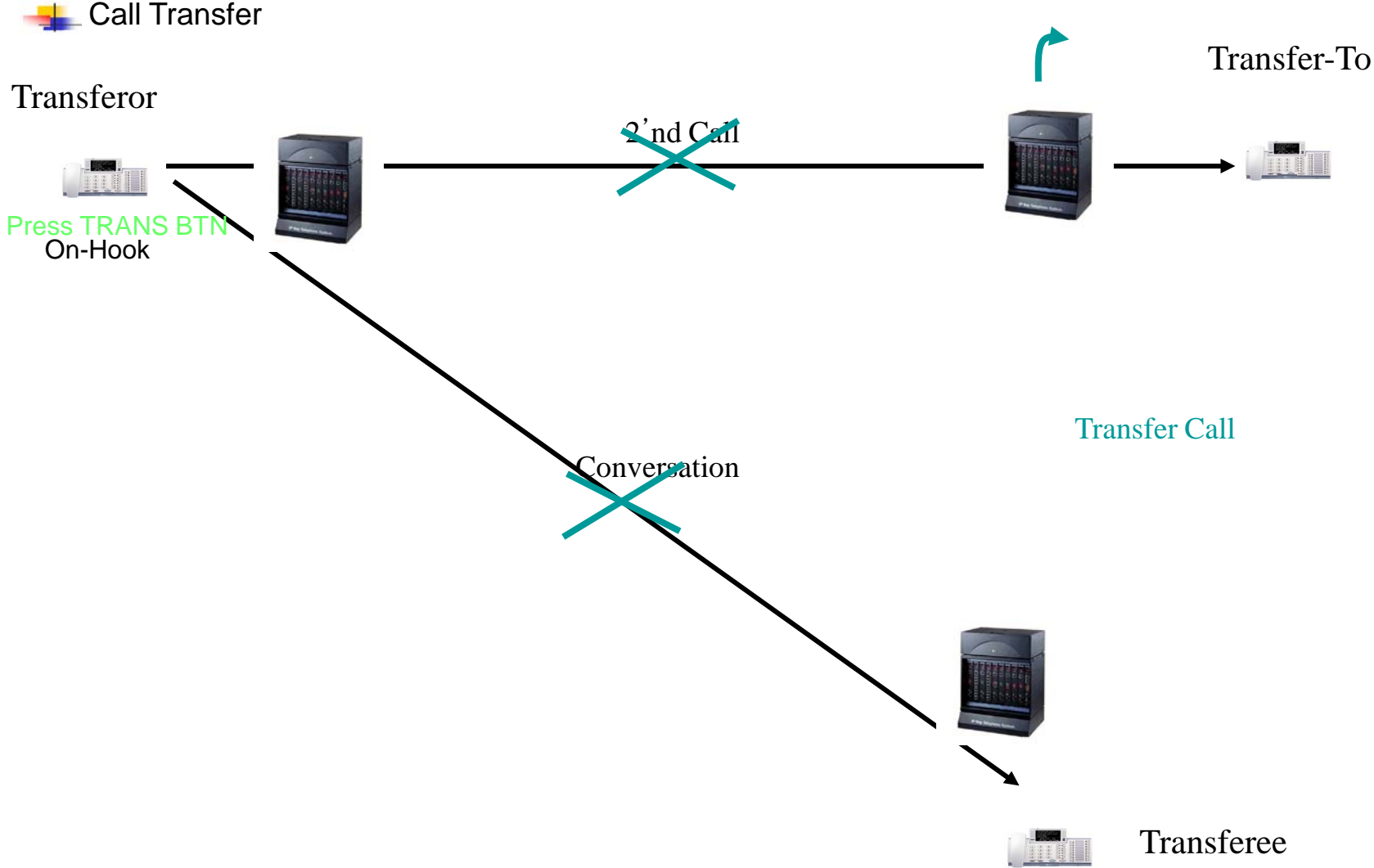


Networking Supported Features

- Net Call
- Call Transfer (Screen / Unscreened)
- Call Forward (Unconditional / Busy / No Answer / Busy & No Answer)
- Name Display
- Call Offer
- Message Waiting Indication (MWI)
- Call Completion (Call Back)
- CO Transit-In/Out
- Conference
- Absent Text Message Service
- Do Not Disturb (DND) Service
- Centralized Attendant Service (CAS)
- Centralized Voice Mail
- Busy Lamp Field (BLF) Service w/wo BLF Manager


Networking

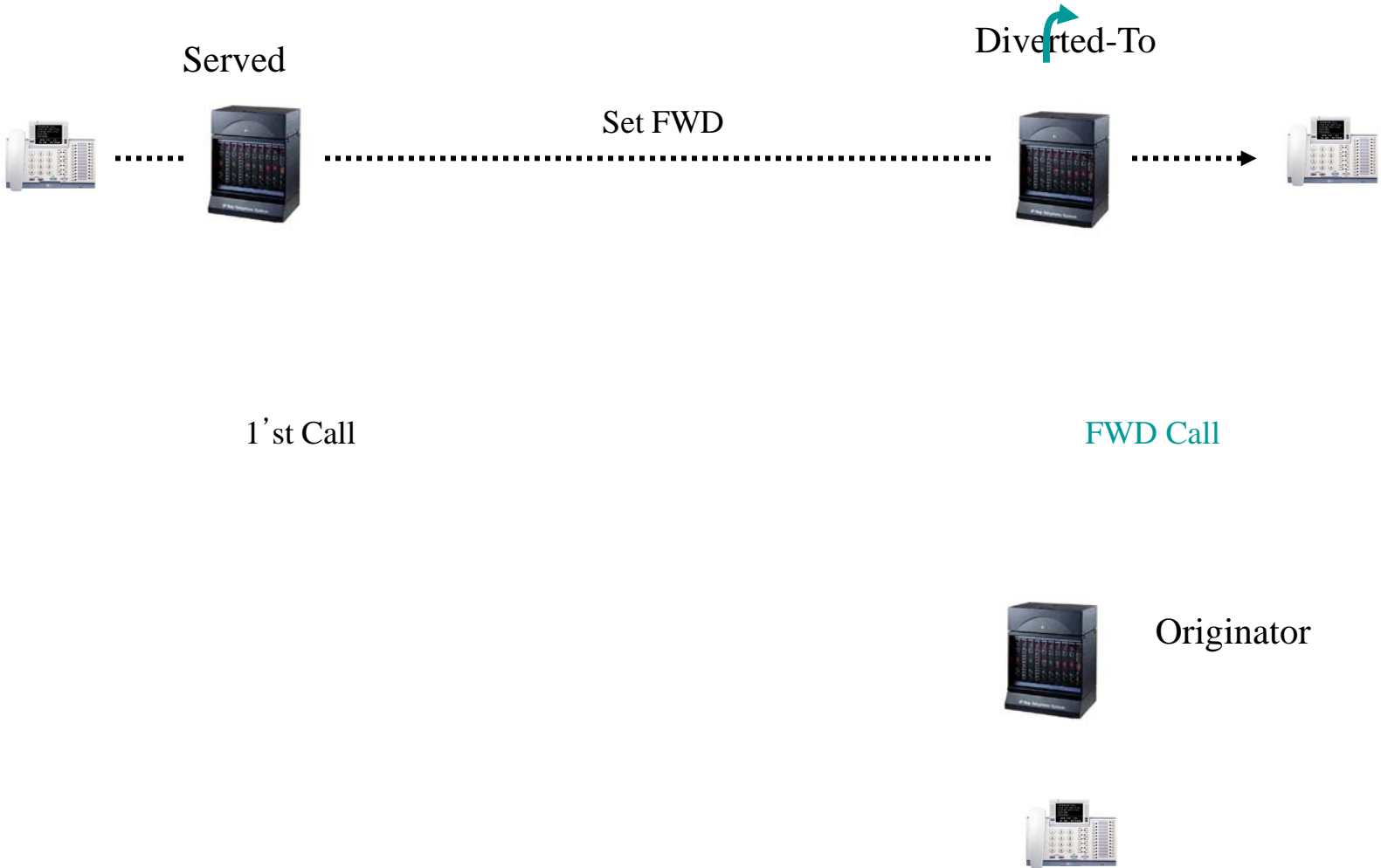
Supported features



Networking

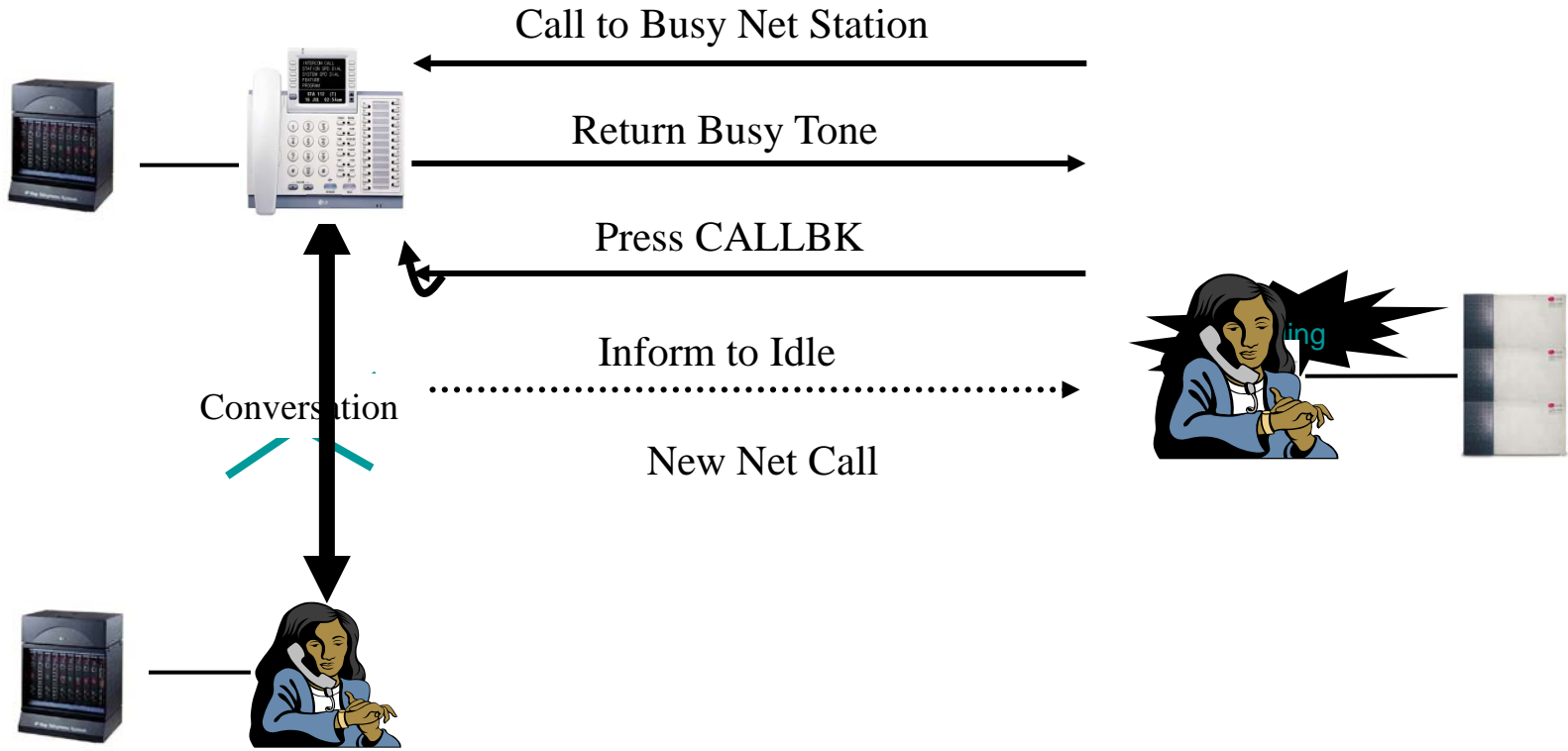
Supported features

 Call Forward



Networking

Supported features



Networking

Supported features



CAS

At Slave System

PGM 164 : 3000, 1000

1000 (CAS) has to be located
at not system attendant
but main attendant.

Dial ATD Call('0')



Slave ATD (3000)

If Slave ATD (3000) in ATD_DND

by pressing [PGM] + 83,

Atd call is routed to CAS(1000)

Dial ATD Call

CO LINE



CAS(1000)

At Master System

PGM 164 : CAS(1000)

At Slave System

PGM 164 : 2000, 1000

Dial ATD Call('0')



Slave ATD (2000)

Slave ATD (2000) in ATD_DND



Slave ATD (4000)

Slave ATD (4000) in ATD_DND



At Slave System

PGM 164 : 4000, 1000

1000 (CAS) has to be located at not system attendant
but main attendant.

Networking

Supported features



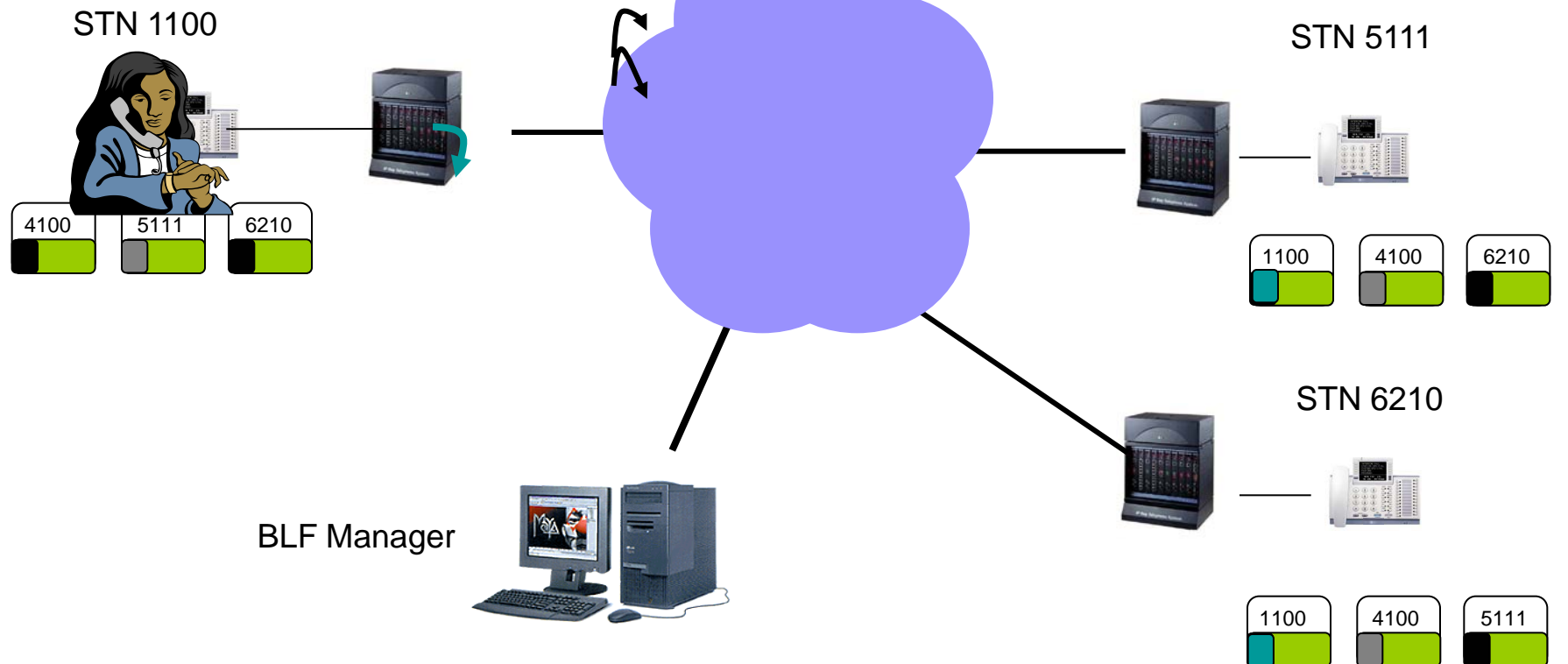
BLF (w/ BLF Server)

At all system, PGM 321 : TCP / UDP port

BLF IP address


Duration of BLF

After that, Reset System, BLF registration is setup.



Networking

Supported features

 BLF (w/o BLF Server)

At MFIM(A)

PGM 324 : 01 – BTN2 : 4****

BTN6 : 150.150.57.146

02 - BTN2:: 5***

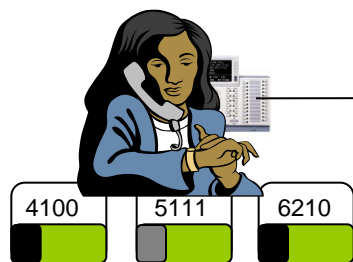
BTN6 : 150.150.57.156

02 - BTN2:: 6***

BTN6 : 150.150.57.166

At other MFIMs, It has to be programmed like above .

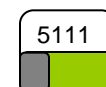
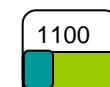
STN 1100



MFIM(A) IP
Address:150.150.57.116

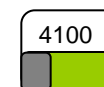
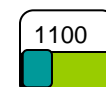
MFIM(B) IP
Address:150.150.57.146

STN 4100



MFIM(C) IP
Address:150.150.57.156

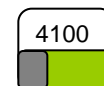
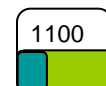
STN 5111



STN 6210



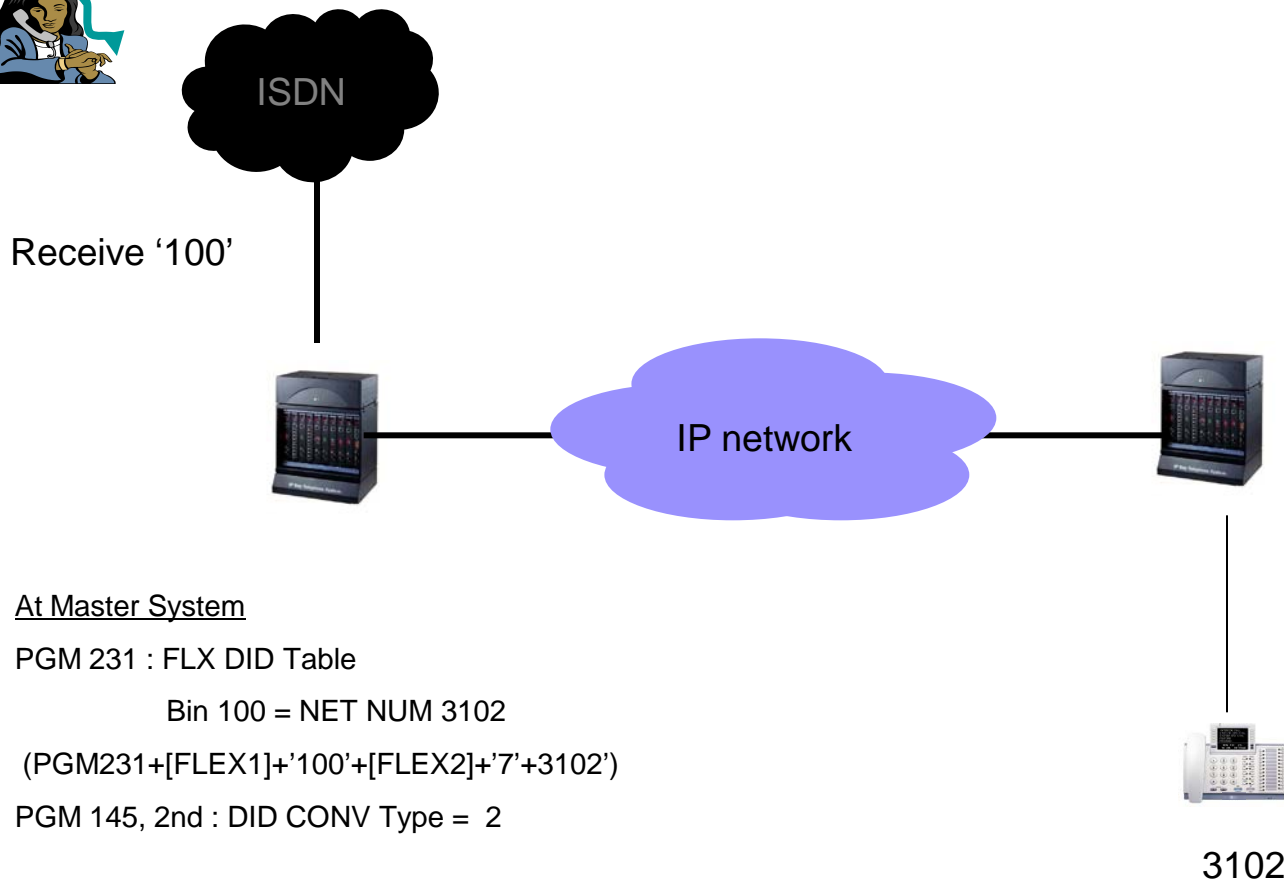
MFIM(D) IP
Address:150.150.57.166



Networking

Supported features

 Transit-In



At Master System


PGM 231 : FLX DID Table

Bin 100 = NET NUM 3102

(PGM231+[FLEX1]+'100'+[FLEX2]+'7'+3102')

PGM 145, 2nd : DID CONV Type = 2

Networking

 Transit-Out (Normal)



Enblock ISDN

PRIM(31~63)



1000



IP network

VOIM(07~30)

150.150.57.123



VOIP(01~06)

150.150.54.101

- Dial CO access code(84)



3000

At Master System

<PGM 322>

CO Line : 07-30

Network CO Line Type : PSTN

NET CO Group : 02

<PGM 324>

System Usage : PSTN

Numbering Code : 84

Networking CO Group : 02

CPN INFORMATION : [Empty]

Digit Repeat : NO (YES if need)

At Slave System

<PGM 322>

CO Line : 01-06

Network CO Line Type : NET

NET CO Group : 01

<PGM 324>

System Usage : PSTN

Numbering Code : 84

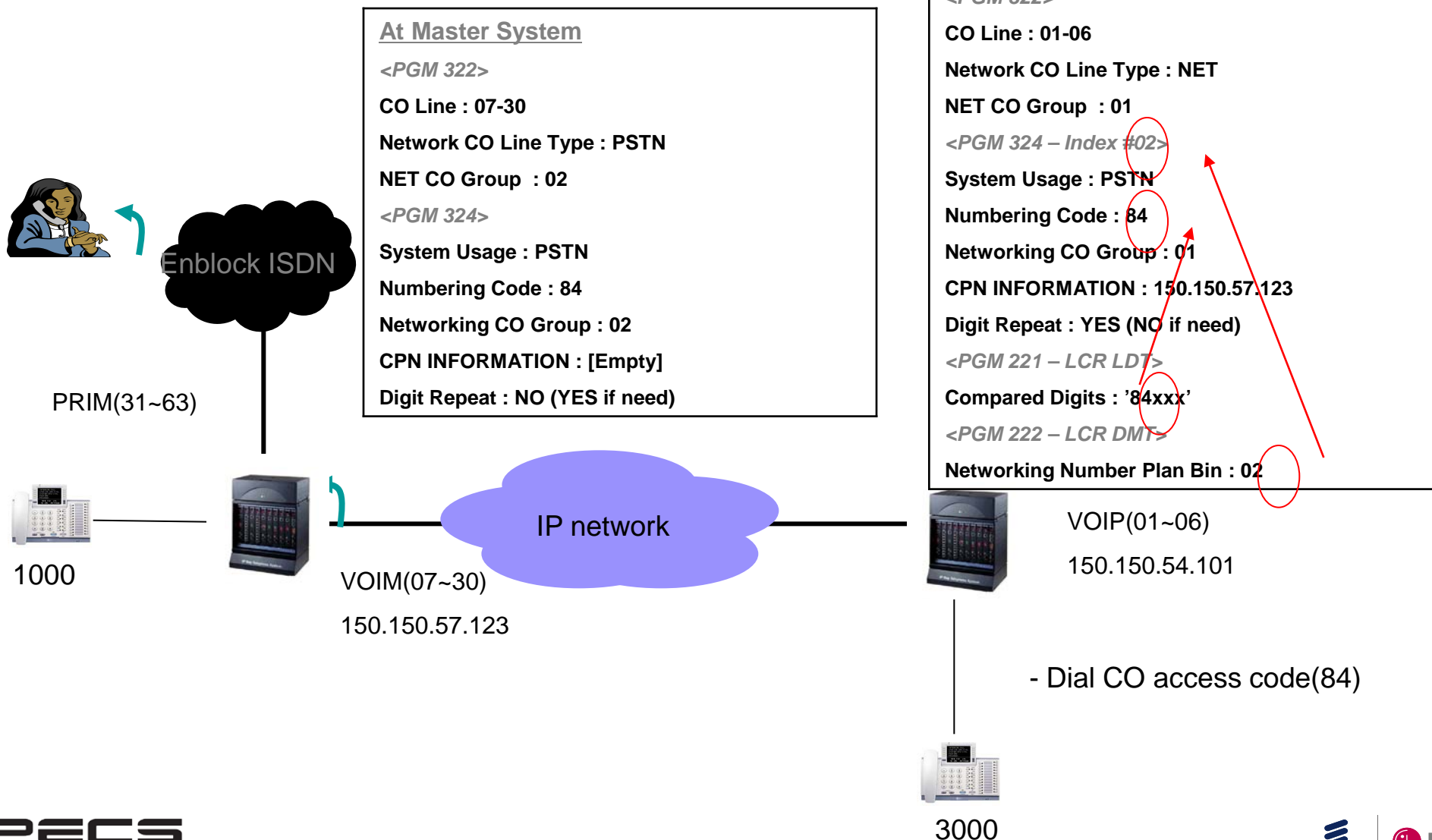
Networking CO Group : 01

CPN INFORMATION : 150.150.57.123

Digit Repeat : YES (NO if need)

Networking

 Transit-Out (LCR)

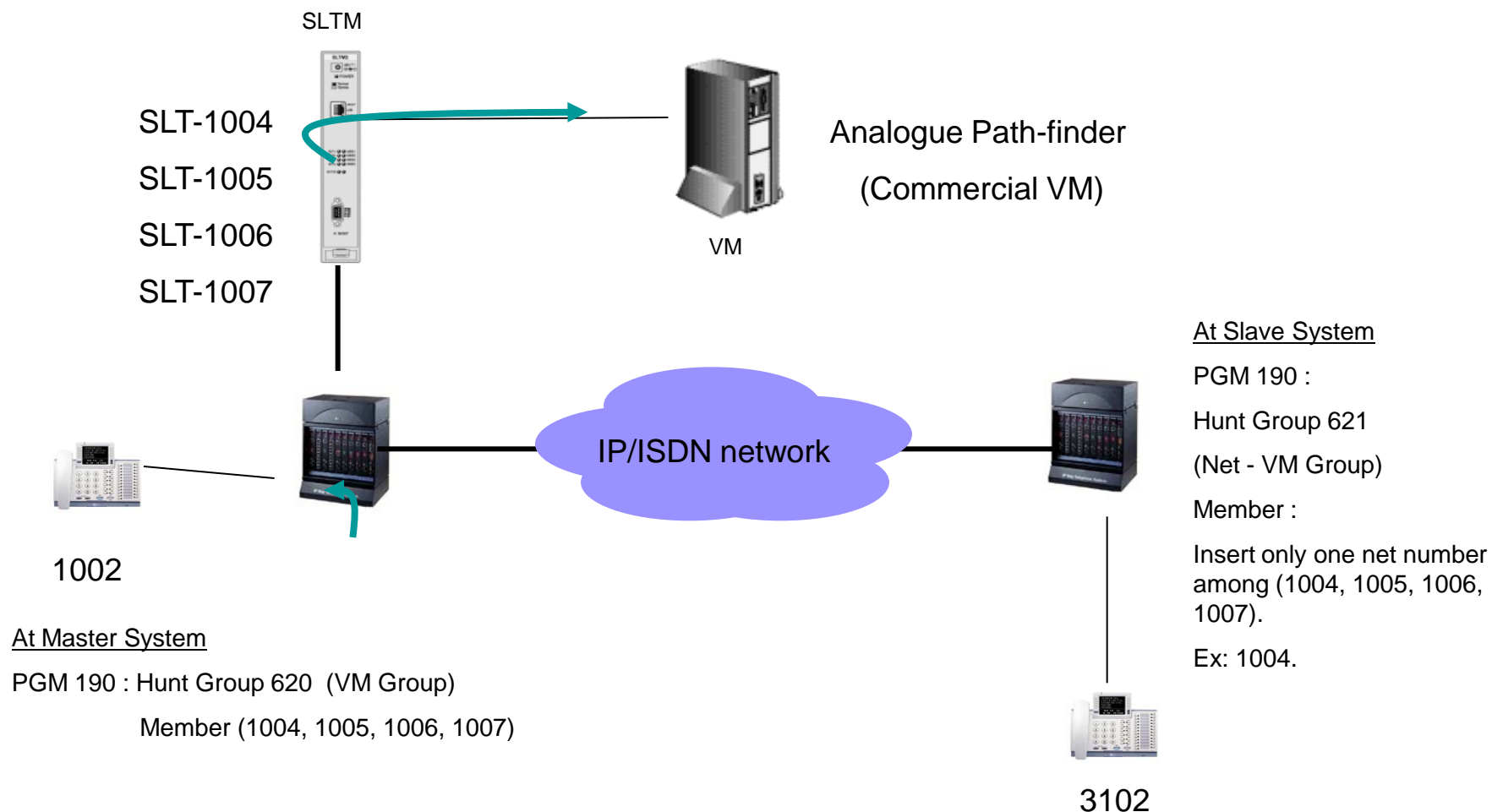


Networking

Supported features

Centralized Voice Mail (w/ commercial VM)

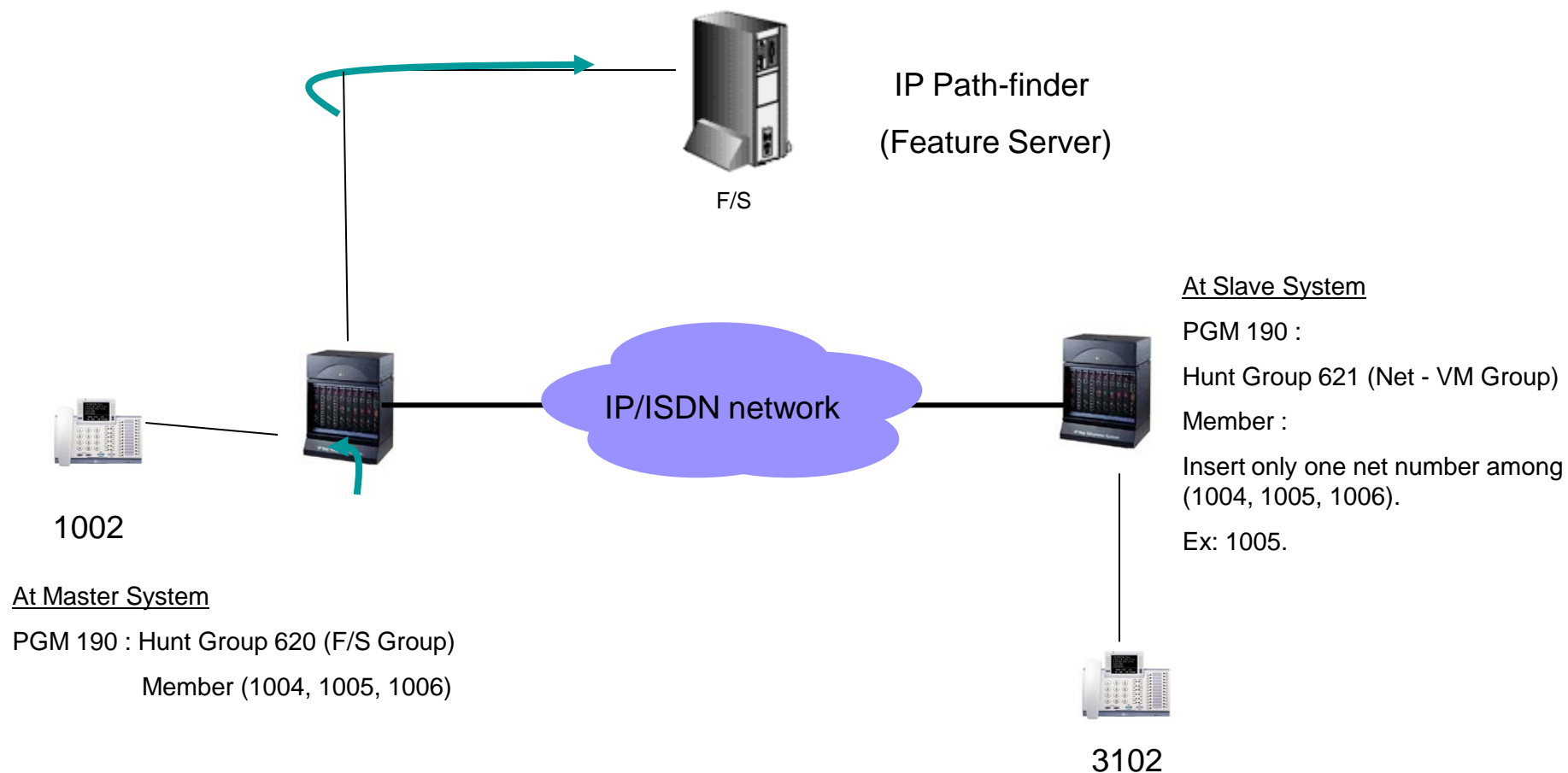
Prerequisite: Zone 1 (1000~1999) and zone2 (3000~3999), networking pgm



Networking

Supported features

Centralized Voice Mail (w/ iPECS Feature Server)



If dial 621, the call is routed to F/S VM at Master system

iPECS

Your Communications Solution