

# KX-NS1000

## Cellular Phone as Extension

**Rev1.0 3 Feb., 2012**

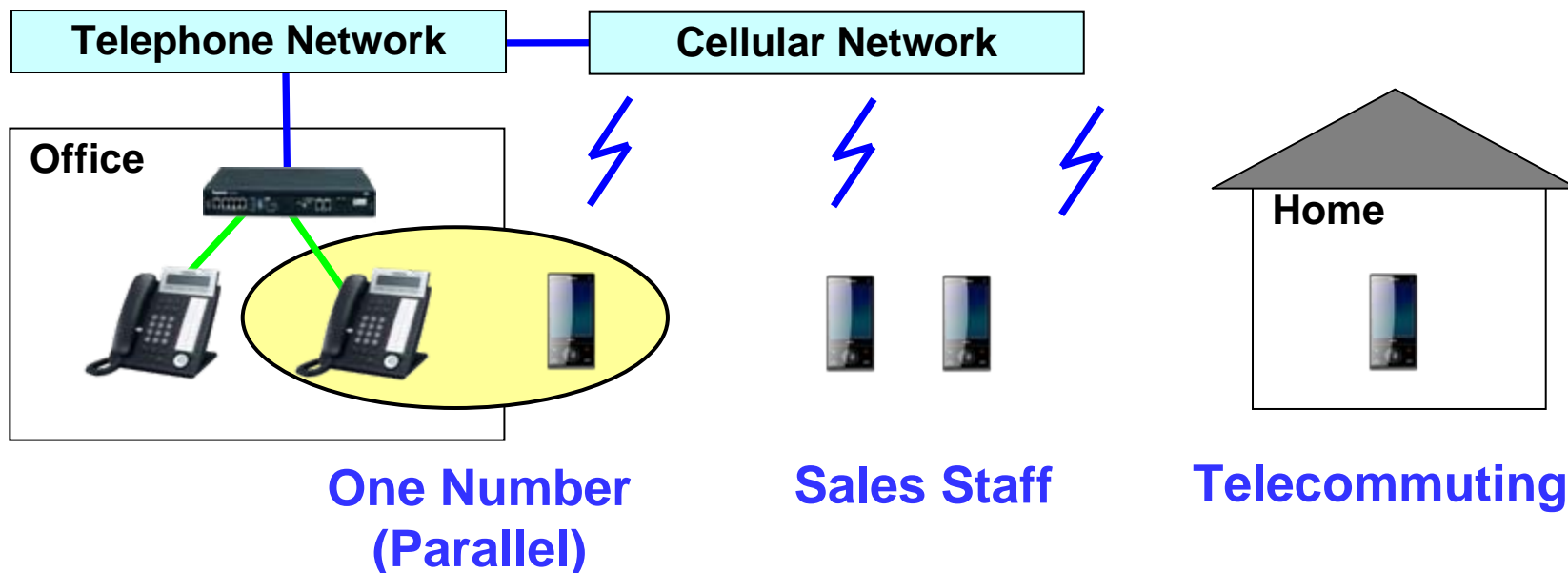


## Cellular phone can work as extension.

Even when your important customer calls your office phone number and you are out of office, you can answer the call using your cellular phone. Your customer needs to know only your office phone number as **one number**.

Your **sales staff** with cellular phone does not need to go to office for meeting.

**Telecommuting** is also available using cellular phone.



## Chapter

### 1) Overview

### 2) Features

1. One Number - Receiving a Call
2. One Number - Transferring a Call after Answer
3. One Number - Making a Call
4. One Number - Receiving a Call from Extension
5. One Number - Making a Call to Extension
6. One Number - Busy Notification by DSS Key
7. One Number - VM Answer when No Answer
8. One Number - Max. 128 extensions including 4 Cellular
9. Cellular without phone in office
10. Meeting using Cellular Phone

### 3) Programming

# Chapter 1

## Overview



## Cellular Phone as Extension

**Activation key : KX-NSE1xx provides one number solution.**

When your customer calls your office phone number, both phone in office and your cellular phone can ring at the same time.

Even after you receive the call using your cellular phone, you can transfer the call to other extension.

When you call your customer using cellular phone through PBX (DISA), the phone number of your office is informed to your customer instead of the number of your cellular phone.

When your colleague dials your extension number or presses DSS key, both phone in office and your cellular phone can ring at the same time.

Even when you are talking using your cellular phone through PBX, DSS key of your extension number becomes red. So other extension can know that your are on the phone now.

So cellular phone can work like SLT phone for basic features such as making a call, receiving a call and transferring a call.

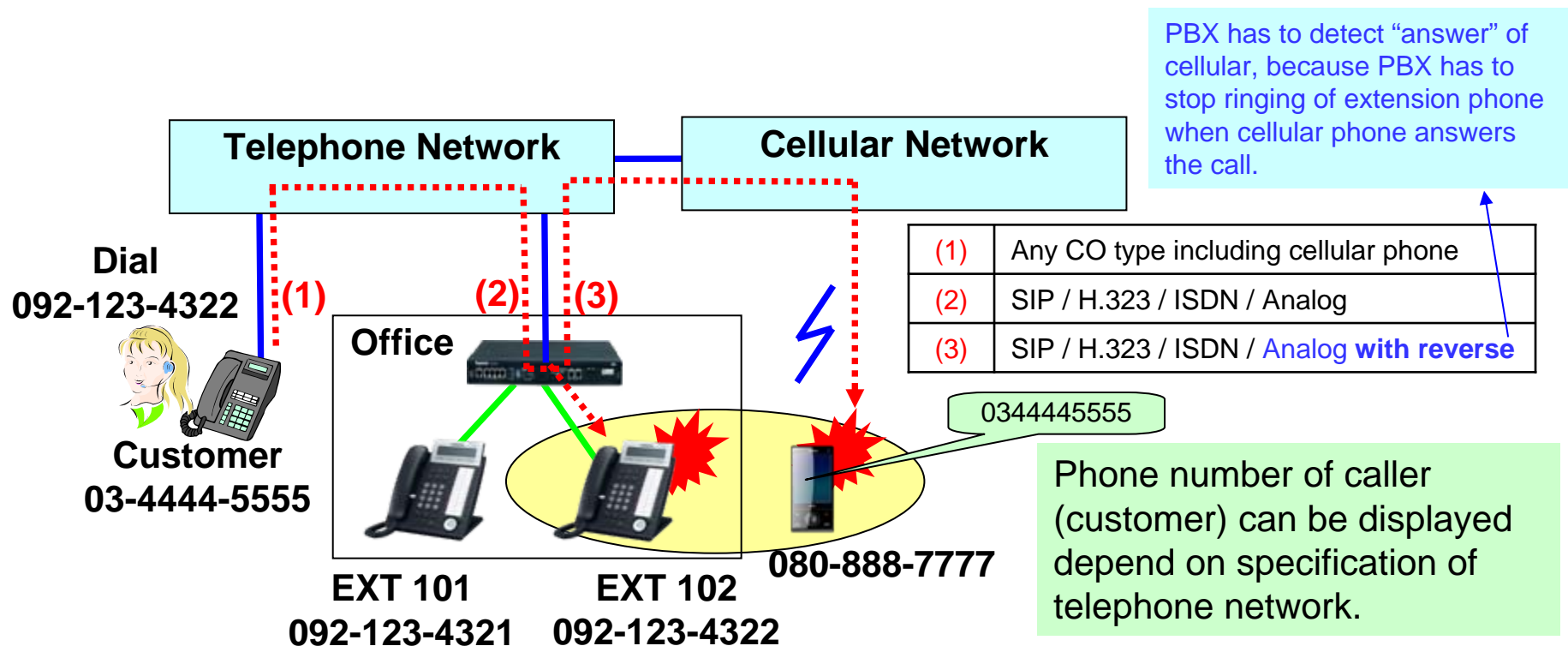
# Chapter 2

## Features

## 2. Features

### » 1. One Number - Receiving a Call

When your customer calls your office phone number, both phone in office and your cellular phone can ring at the same time.



Extension 102 sets call forwarding no answer to cellular phone (080-888-7777) with **"keep ringing"** mode.



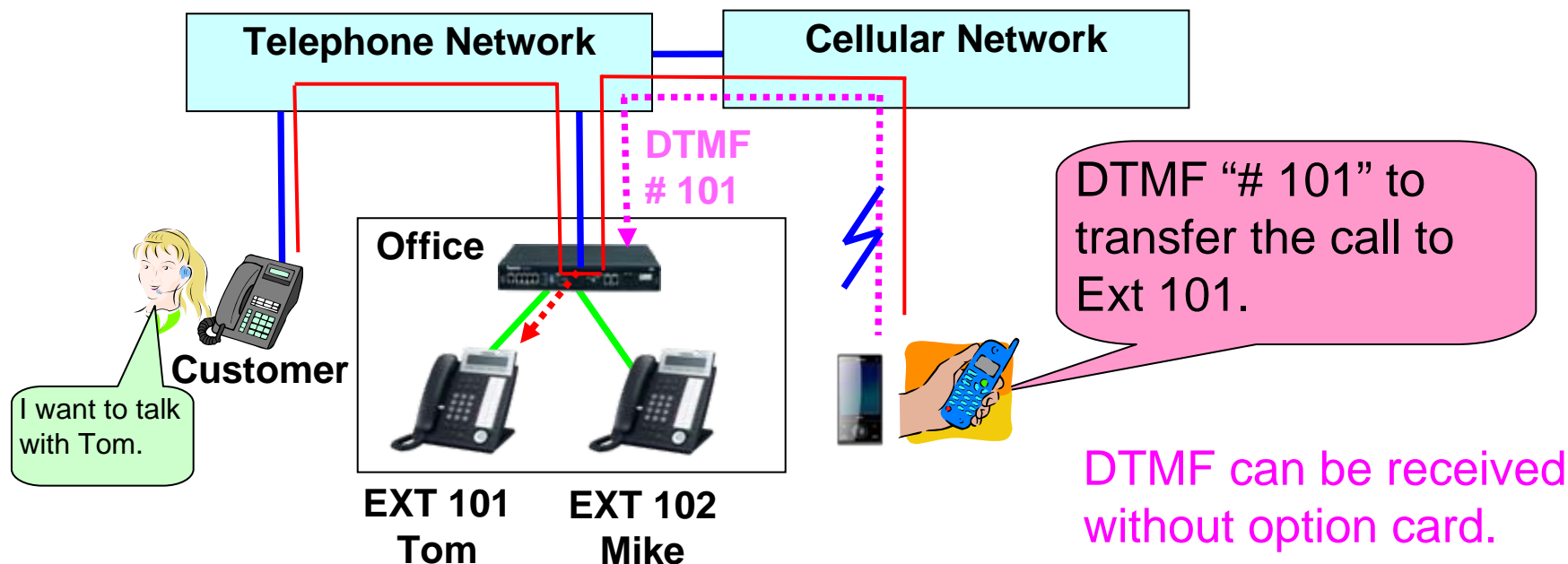
## 2. Features



### 2. One Number – Transferring a Call after Answer

When your customer calls your office phone number, both phone in office and your cellular phone can ring at the same time.

Even after you receive the call using your cellular phone, you can transfer the call to other extension.



“DTMF-#” from CO works as “Flash key” of SLT.

Transfer (Unscreened / Screened / Paging) and Conference are available.



## 2. Features

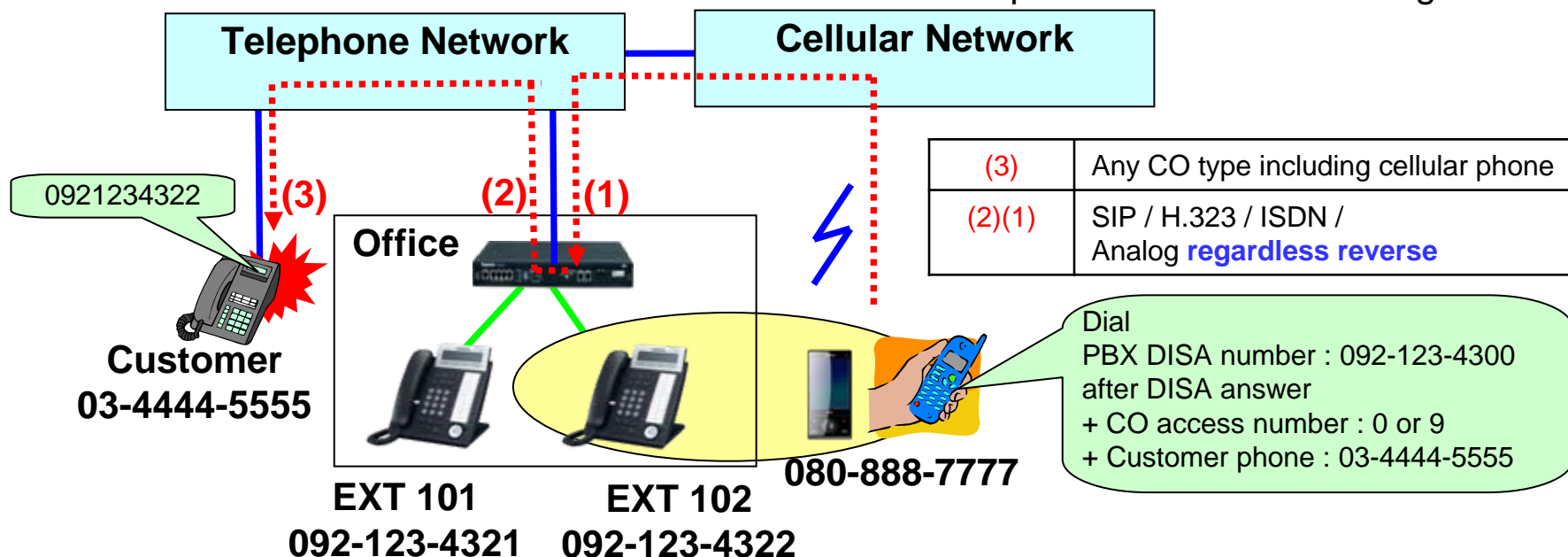


### 3. One Number - Making a Call

When you call your customer using cellular phone through PBX (DISA), the phone number of your office is informed to your customer instead of the number of your cellular phone.

DID number can be informed as CLIP for SIP / H.323 / ISDN.

Phone number of the line is informed to cellular from telephone network for analog.



Cellular phone can be recognized as extension (102) automatically based on pre-assigned caller ID (080-888-7777).

## 2. Features

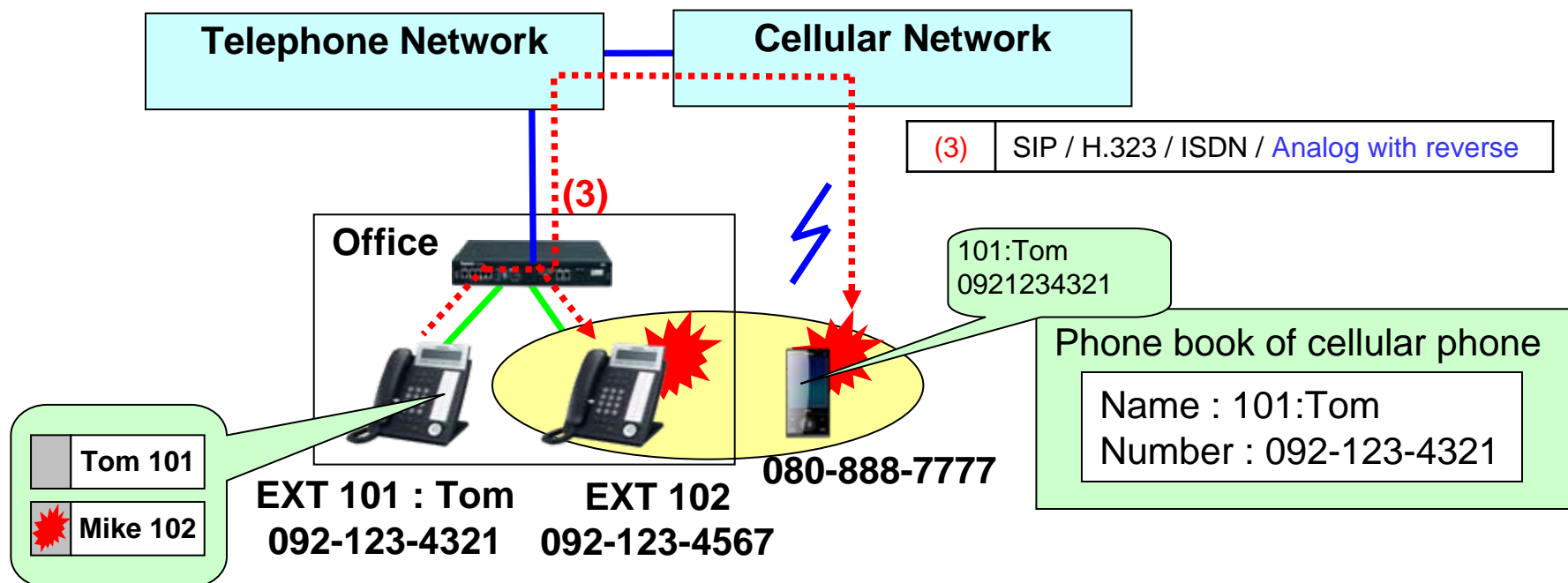


### 4. One Number - Receiving a Call from Extension

When your colleague dials your extension number or presses DSS key, both phone in office and your cellular phone can ring at the same time.

DID number can be informed to cellular as CLIP for SIP / H.323 / ISDN.

Phone number of the line is informed to cellular from telephone network for analog.

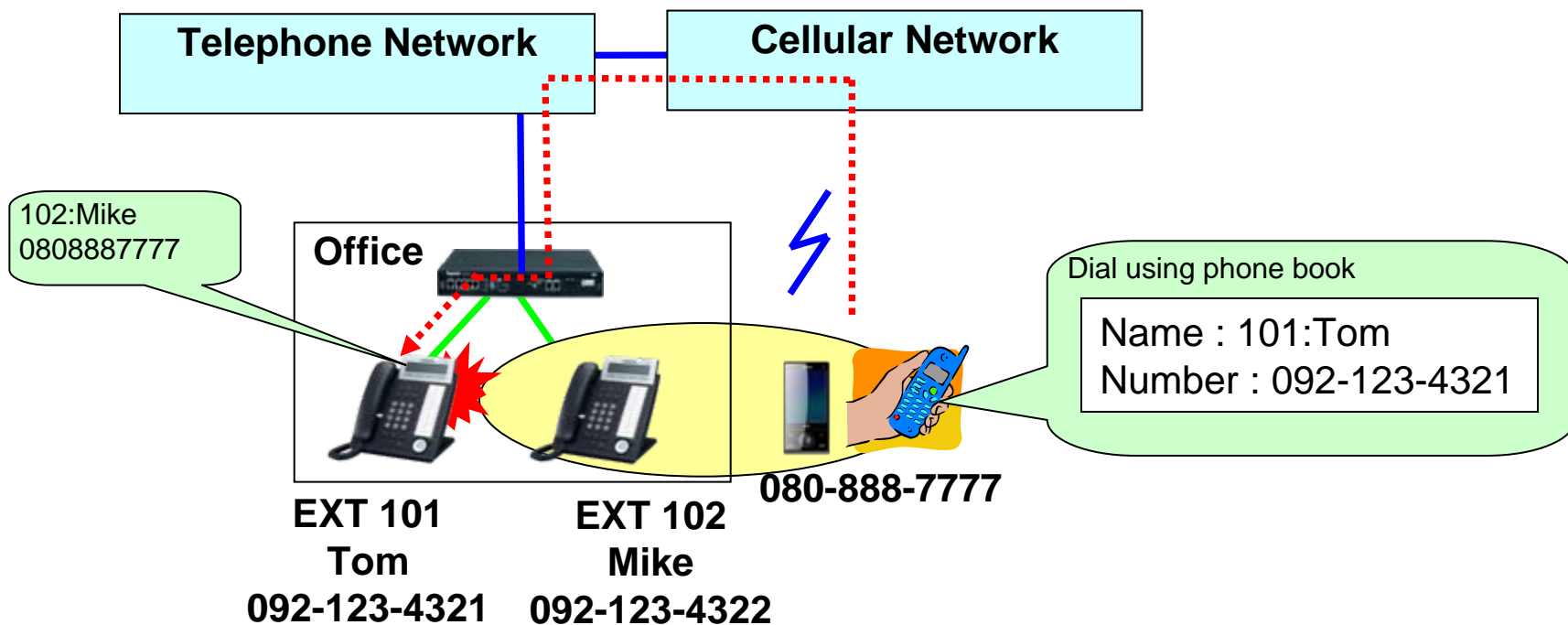


Extension 102 sets call forwarding no answer to cellular phone (080-888-7777) with “keep ringing” mode.

## 2. Features

### » 5. One Number - Making a Call to Extension

You can call your colleague using cellular phone directly (DID) or through DISA.



“102:Mike” is assigned as PBX speed dial name for 0/9-080-888-7777.

## 2. Features

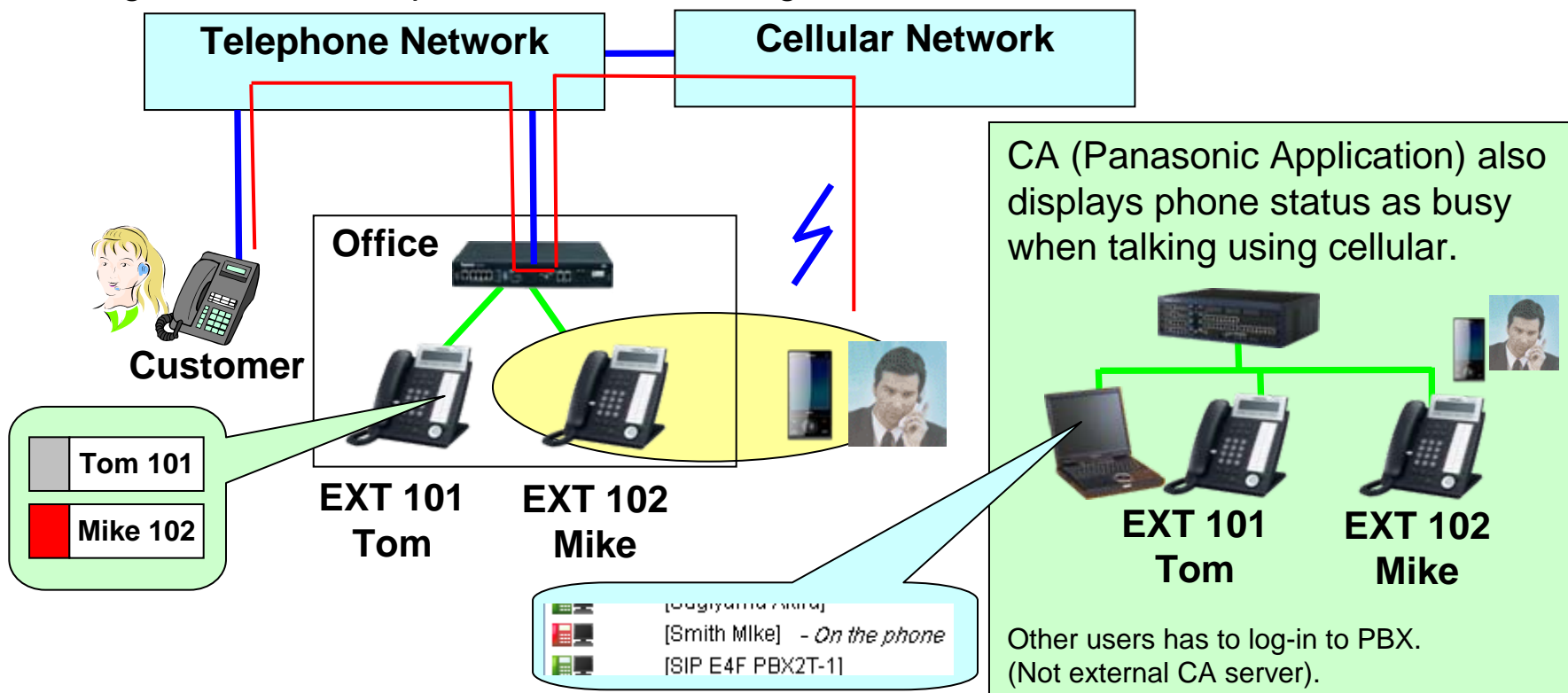


### 6. One Number - Busy Notification by DSS Key

Even when you are talking using your cellular phone through PBX, DSS key of your extension number becomes red. So other extension can know that your are on the phone now.

Receiving a call : Cellular phone has to be called with a paired extension.

Making a call : Cellular phone has to call using DISA.

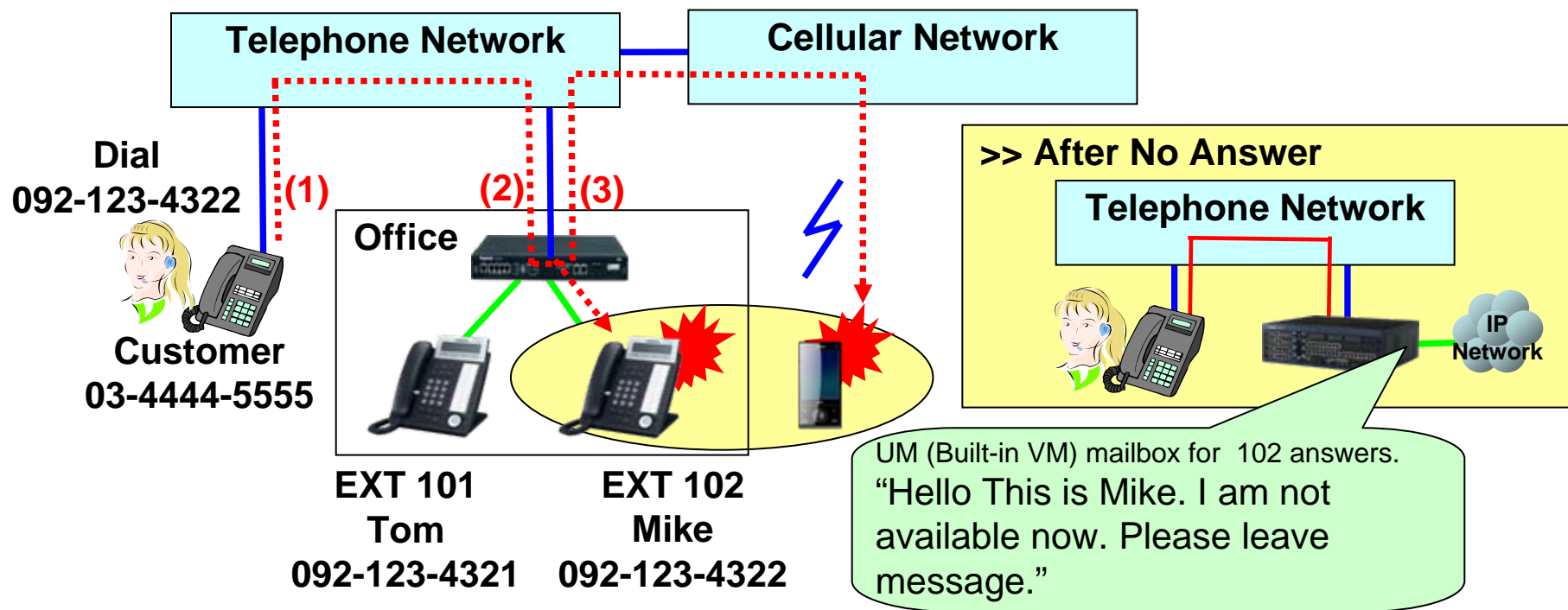


## 2. Features



### 7. One Number - VM Answer when No Answer

When you cannot answer incoming call, built-in voice mail feature of UM answers the call for you. Left voice message can be sent to PC or cellular phone as attached file of e-mail automatically.



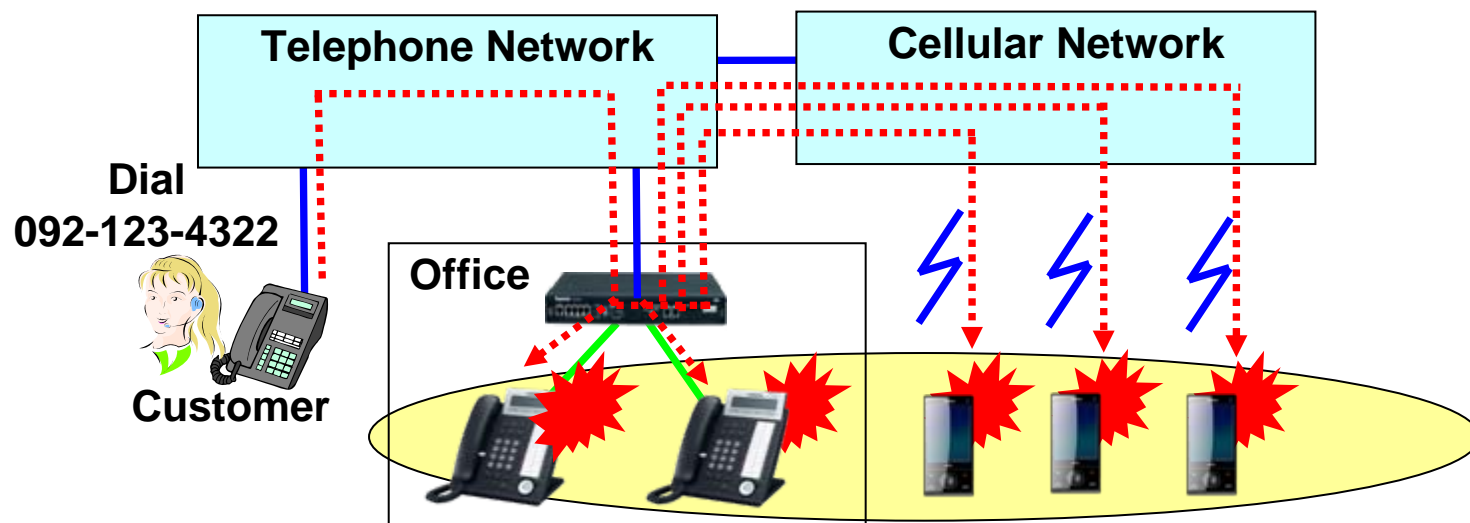
UM (VM) is assigned as destination of intercept routing.

## 2. Features



### 8. One Number – Max. 128 extensions including 4 Cellular

Maximum 128 extension phones including 4 cellular phones can be ringed for one incoming call at the same time using ICD group feature.



### » 9. Cellular without Phone in Office

Even if remote worker (sales staff or telecommuting worker) does not have phone in office, they also have extension number for their cellular phone.

#### <Method 1>

Instead of forward no answer for actual extension phone, forward all for “Virtual PS ” is programmed.

In this case, “Busy notification by DSS key“ does not work.

Virtual PS = DECT PS hardware is not registered.

#### <Method 2>

Softphone is installed to PC in remote office. Softphone works as “phone in office” at software point of view.

In this case, “Busy notification by DSS key“ can work also.

Fwd “No Answer or Busy” to cellular is recommended instead of Fwd “No Answer” so that call can be forwarded to cellular, even if power of PC is off.

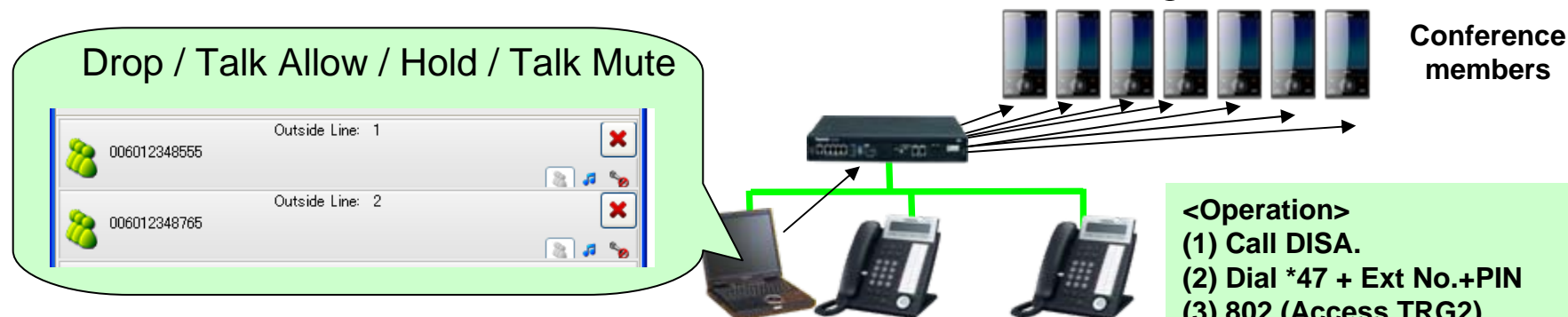




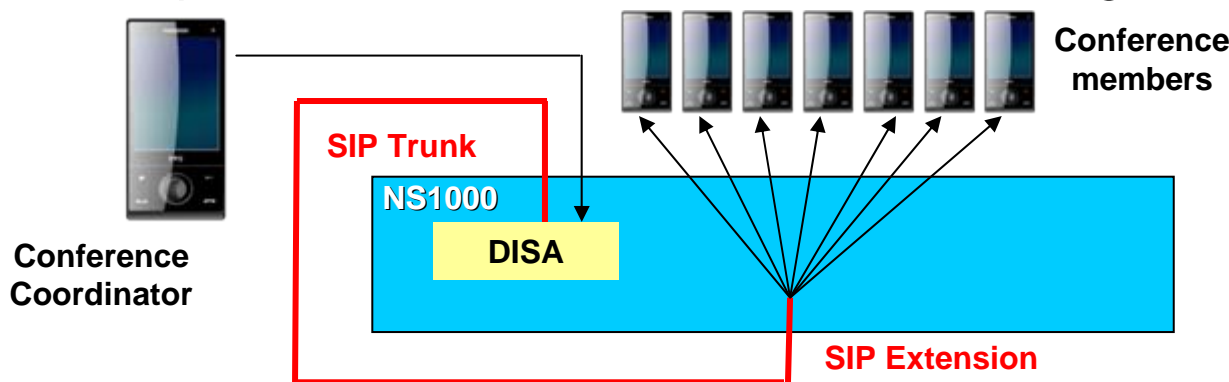
### 10. Meeting using Cellular

Maximum 32 members meeting is available. Maximum 8 people can talk at the same time. Other member can listen only.

Conference coordinator can control other member using CA.



Cellular phone user can also coordinate meeting.



#### <Operation>

- (1) Call DISA.
- (2) Dial \*47 + Ext No.+PIN
- (3) 802 (Access TRG2)  
if loop SIP trunk is TRG2
- (4) and dial 4

// Note for (4) //

Dial 4 = Quick dial  
\*32 + Conf Group No. + #

Or "# as end of call" is disabled for SIP trunk. Otherwise "#" is not dialed from SIP trunk. And assign "\*32XX" to dialing plan.



### Conditions

Cellular phone can be recognized as extension manually instead of automatic recognition by caller ID of cellular phone.

This also allows busy display of DSS key.

This allows you to send different DID number as CLIP depend on customer.

CLIP number is pre-assigned for each extension.



Dial  
PBX DISA number : 092-123-4300  
after DISA answer  
**+ \*47 + 102 (Ext Number) + 1234 (PIN)**  
+ CO access number : 0 or 9  
+ Customer phone : 03-4444-5555

#### Phone book of cellular phone

Name :  
Susan (Customer)



Number :  
0921234300**P**\*47102123400344445  
555

Busy display of DSS key is available as follows.

- Receiving a call from customer = Available
- Receiving a call from extension = Available
- Calling customer from cellular phone through DISA = Available
- Calling extension from cellular phone through DISA = Available
- Calling from cellular without DISA (\*) = Not Available

(\*) For example, cellular calls extension directly using DID.

# Chapter 3

## Programming

# 3. How to program?



## Cell-Phone Integration

First of all the following setting is needed.

**Setup – PBX Configuration – 4.Extension – 1.Wired Extension – 1.Extension Setting – Option9 -> Set “Mobile Extension” to “Enable”.**

Web Maintenance Console - Mozilla Firefox

Web Maintenance Console

192.168.0.201/WebMC/index/

NS1000 | Web Maintenance Console

Login as INSTALLER

Users

PBX Configuration

1.Configuration

2.System

3.Group

4.Extension

1.Wired Extension

1.Extension Settings

2.FWD/DND

3.Speed Dial

4.Flexible Button

5.PF Button

6.NDSS Link Data - Send

2.Portable Station

5.Optional Device

6.Feature

7.TRS

8.ARS

9.Private Network

10.CO & Incoming Call

11.Maintenance

Extension Settings

Copy to CLIP Generate

« Option 4 Option 5 Option 6 Option 7 Option 8 **Option 9** FWD / DND »

Extension Number	Extension Name (20 characters)	PDN Delayed Ringing	Built-in Communication Assistant	Mobile Extension
101		ALL	Enable	Disable
102		Immediate	Enable	Enable
103		Immediate	Enable	Disable
104		Immediate	Enable	Disable
105		Immediate	Enable	Disable
106		Immediate	Enable	Disable
107		Immediate	Enable	Disable
108		Immediate	Enable	Disable
109		Immediate	Enable	Disable
110		Immediate	Enable	Disable
111		Immediate	Enable	Disable
112		Immediate	Enable	Disable
113		Immediate	Enable	Disable

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OK Cancel Apply

Activation key is required.

## » One Number – Receiving a Call

The screenshot shows the NS1000 Web Maintenance Console interface. The browser is Mozilla Firefox, and the URL is 192.168.0.201/WebMC/index/. The page title is "NS1000 Web Maintenance Console". The user is logged in as "INSTALLER".

The left sidebar shows the navigation menu with the following items:

- Users
- PBX Configuration
  - 1. Configuration
  - 2. System
  - 3. Group
  - 4. Extension
    - 1. Wired Extension
      - 1. Extension Settings (highlighted in orange)
      - 2. FWD/DND
      - 3. Speed Dial
      - 4. Flexible Button
      - 5. PF Button
      - 6. NDSS Link Data - Send
    - 2. Portable Station
  - 5. Optional Device
  - 6. Feature
  - 7. TRS
  - 8. ARS
  - 9. Private Network
  - 10. CO & Incoming Call
  - 11. Maintenance

The main content area is titled "Extension Settings". It has tabs for "Copy to" and "CLIP Generate". Below the tabs are buttons for "Option 4", "Option 5", "Option 6", "Option 7", "Option 8", "Option 9", and "FWD / DND" (selected). The table below shows the settings for the selected option.

FWD Destination for Call from CO	FWD Mode for Call from Extension	FWD Destination for Call from Extension	FWD No Answer Time (s)	Keep ring after FWD NA to CO
ALL	ALL	ALL	15	ALL
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable
None	None	None	15	Disable

The first row of the table is highlighted in orange. Red boxes highlight the "FWD No Answer Time (s)" and "Keep ring after FWD NA to CO" columns for the first row. A red arrow points to the word "Activation" on the right side of the image.

**Activation key is required.**

# 3. How to program?



## One Number – Transferring a Call after Answer

**DISA (DTMF Receiver) is required to receive DTMF.**

**Setup – PBX Configuration – 5.Optional Device – 1.DISAsystem – Option 1 – CO-CO with DISA -> Set “FWD / Transfer to Public CO” to “Enable”, “Transfer by DTMF #” to “Enable”.**

Web Maintenance Console – Mozilla Firefox

Web Maintenance Console

192.168.0.201/WebMC/index/

NS1000 | Web Maintenance Console

Login as INSTALLER

NS1000

Users

PBX Configuration

1.Configuration

2.System

3.Group

4.Extension

5.Optional Device

1.DOORPHONE

2.External Pager

3.Voice Message

1.DISAsystem

2.DISAMessage

4.External Relay

5.External Sensor

6.Feature

7.TRS

8.ARS

9.Private Network

10.CO & Incoming Call

11.Maintenance

UM Configuration

Network Service

DISA System

Option 1 Option 2

DISA to Private Network

☐ Enable ☒ Disable (Release DISA)

Fwd / Transfer to Public CO

☒ Enable (Get DISA) ☐ Disable

Fwd / Transfer to Private Network

☐ Enable (Get DISA) ☒ Disable

Transfer by DTMF # (Activation Key Required)

☒ Enable (as Flash) ☐ Disable

Return to DISA Top Menu by DTMF " \* "

☒ Enable ☐ Disable

OK Cancel Apply

Activation key is required.

# 3. How to program?



## One Number – Making a Call

Pre-assigned caller ID (080-888-7777) is recognized as extension (102) automatically.

Setup – PBX Configuration – 5.Optional Device – 1.DISA System – Option 1

-> Set “Remote Walking COS through DISA without PIN” to “Enable” and set “System Speed Dial”.

The screenshot shows the NS1000 Web Maintenance Console in a Mozilla Firefox browser. The left sidebar lists the configuration tree, with '1.DISA System' selected. The main area shows the 'DISA System' configuration for 'Option 1'. Under 'DISA Security Mode', 'Trunk' is selected. A red box highlights the 'Remote Walking COS through DISA without PIN (Activation Key Required)' section, where 'Enable' is selected. A red arrow points to this section with the text 'Activation key is required.' Below this, the 'System Speed Dial' section is visible, showing a table of speed dial entries. A red box highlights the first entry in the table.

System Speed Dialling Number	Name (20 characters)	CO Line Access Number + Telephone Number (32 digits)	CLI Destination
000	102 Mike Smith	00808887777	102
001			
002			
003			
004			



# 3. How to program?



## Cellular without Phone in Office (Virtual PS)

Instead of forward no answer for actual extension phone, forward all for “Virtual PS ” is programmed.

**Web Maintenance Console - Mozilla Firefox**

File Edit View History Bookmarks Tools Help

Web Maintenance Console

192.168.0.101/WebMG/index/

NS1000 Web Maintenance Console

Login as INSTALLER NS1000\_Master

**Portable Station**

Registration De-registration Forced De-registration

Personal Identification Number : 1234

Index	Extension No.	Extension Name	Status
1	301	VPS301	None
2	302	VPS302	None
3	303	VPS303	None
4	304	VPS304	None
5			None
6			None
7			None
8			None
9			None
10			None
11			None
12			None
13			None
14			None
15			None

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OK Cancel Apply

# 3. How to program?



## Cellular without Phone in Office (Virtual PS)

Setup – PBX Configuration – 4.Extension – 1.Extension Settings – Option 9  
-> Set “Mobile Extension” to “Enable”.

Web Maintenance Console - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Web Maintenance Console

192.168.0.101/WebMC/index/

NS1000 Web Maintenance Console

Login as INSTALLER

NS1000\_Master

Users

PBX Configuration

1.Configuration

2.System

3.Group

4.Extension

1.Wired Extension

2.Portable Station

1.Extension Settings

2.FWD/DND

3.Flexible Button

4.Sending NDSS link data

5.Optional Device

6.Feature

7.TRS

8.ARS

9.Private Network

10.CO & Incoming Call

11.Maintenance

UM Configuration

Network Service

Extension Settings

User Group Table Copy to CLIP Generate

Option 4 Option 5 Option 6 Option 7 Option 8 Option 9 FWD / DND

Extension Number	Extension Name (20 characters)	PDN Delayed Ringing	Built-in Communication Assistant	Mobile Extension
301	VPS301	Immediate	Enable	Enable
302	VPS302	Immediate	Enable	Enable
303	VPS303	Immediate	Enable	Disable
304	VPS304	Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable
		Immediate	Enable	Disable

301 : VPS301 Page 1 of 26 View 1 - 20 of 512

OK Cancel Apply

Activation key is required.

# 3. How to program?



## Meeting using Cellular : SIP Trunk – SIP Ext Loop

### V-SIPEXT setting

#### 1. Port Property - Virtual SIP Extension

-> Assign “Password”.

Web Maintenance Console - Mozilla Firefox

192.168.0.201/WebMC/index/

NS1000 Web Maintenance Console

Login as INSTALLER

Port Property - Virtual SIP Extension

Copy to

Port	Extension Number	Password	Connection	Current IP Address
1	167	1234	INS	192.168.0.201
2	168		Fault	0.0.0.0
3	169		Fault	0.0.0.0
4	170		Fault	0.0.0.0
5	171		Fault	0.0.0.0
6	172		Fault	0.0.0.0
7	173		Fault	0.0.0.0
8	174		Fault	0.0.0.0
9	175		Fault	0.0.0.0
10	176		Fault	0.0.0.0
11	177		Fault	0.0.0.0
12	178		Fault	0.0.0.0
13	179		Fault	0.0.0.0
14	180		Fault	0.0.0.0
15	181		Fault	0.0.0.0

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View 1 - 20 of 32

OK Cancel Apply

# 3. How to program?



## Meeting using Cellular : SIP Trunk – SIP Ext Loop

### V-SIPGW setting

#### 1. Port Property - Virtual SIP Gateway – Main

- > Set “Cannel Attribute” to One Basic Channel and One Additional Channel
- Set “SIP Server IP Address” to “Own PBX IP Address”.

The screenshot shows the NS1000 Web Maintenance Console interface. The main content area is titled "Port Property - Virtual SIP Gateway". Below this, there are tabs for "Main", "Account", "Register", "IAT", "Option", "Calling Party", "Called Party", "Voice FAX", "RTP/RTCP", and "T.38". The "Main" tab is selected.

A table displays the configuration for various channels. The table has columns for "Connection", "Channel Attribute", "Provider Name (20 characters)", "SIP Server Name (100 characters)", "SIP Server IP Address", and "SIP Server Port Number".

Connection	Channel Attribute	Provider Name (20 characters)	SIP Server Name (100 characters)	SIP Server IP Address	SIP Server Port Number
INS	Basic channel	SIPTrunk loopback		192.168.0.201	35060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Additional channel for Slot 31 Ch 1				5060
INS	Basic channel	SIPTrunk_SIPExt loop		192.168.0.201	5060
INS	Additional channel for Slot 31 Ch 9				5060
Fault	Not Used				5060
Fault	Not Used				5060
Fault	Not Used				5060

A red box highlights the rows for "Basic channel" and "Additional channel for Slot 31 Ch 9" in the table.

# 3. How to program?



## Meeting using Cellular : SIP Trunk – SIP Ext Loop

### V-SIPGW setting

#### 2. Port Property - Virtual SIP Gateway – Account

-> Assign “User Name”, “Authentication ID” and “Authentication Password”.

- User Name & ID = Extension Number of SIP extension

- Password = Password of SIP extension

**Web Maintenance Console - Mozilla Firefox**

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Web Maintenance Console

192.168.0.201/WebMC/index/

NS1000 Web Maintenance Console

Login as INSTALLER

NS1000

**Port Property - Virtual SIP Gateway**

Select Provider Add Provider

Main Account Register IAT Option Calling Party Called Party Voice/FAX RTP/RTCP T.38

Port	Connection	User Name (64 characters)	Authentication ID (64 characters)	Authentication Password (32 characters)
1	ALL			
2	INS	12345	12345	12345
3	INS			
4	INS			
5	INS			
6	INS			
7	INS			
8	INS			
9	INS	167	167	1234
10	INS			
11	Fault			
12	Fault			
13	Fault			

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OK Cancel Apply

# 3. How to program?



## Meeting using Cellular

### Quick Dial setting

Setup – PBX Configuration – 6.Numbering Plan – 2.Quick Dial

-> Set “Dial” to “4” and set “Phone Number” to “\*321#”(1 = Conference Group Number).

**Web Maintenance Console - Mozilla Firefox**

File Edit View History Bookmarks Tools Help

Web Maintenance Console

192.168.0.201/WebMC/index/

NS1000 Web Maintenance Console

Login as INSTALLER

NS1000

**Quick Dial**

☐ Use quick dial for rerouting to public CO when TIE line does not work.

No.	Feature	Dial (8 digits)	Phone Number (32 digits)
1	Quick Dialling 1	4	*321#
2	Quick Dialling 2		
3	Quick Dialling 3		
4	Quick Dialling 4		
5	Quick Dialling 5		
6	Quick Dialling 6		
7	Quick Dialling 7		
8	Quick Dialling 8		
9	Quick Dialling 9		
10	Quick Dialling 10		
11	Quick Dialling 11		
12	Quick Dialling 12		
13	Quick Dialling 13		
14	Quick Dialling 14		
15	Quick Dialling 15		
16	Quick Dialling 16		
17	Quick Dialling 17		

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View 1 - 20 of 4 000

OK Cancel Apply

# 3. How to program?



## Meeting using Cellular

### Dialing Plan setting

Setup – PBX Configuration – 3.Group – 1.Trunk Group – 4.Dialling Plan

-> Assign “Leading Number” to “ \*32XX ”.

**NS1000 | Web Maintenance Console**

Login as INSTALLER

**Dialling plan**

Auto Assign

Dialling Plan Table

No.	Leading Number (32 digits)	Removed Number of Digits	Added Number (32 digits)
1	477XXXX	0	
2	*32XX	0	
3		0	
4		0	
5		0	
6		0	
7		0	
8		0	
9		0	
10		0	
11		0	
12		0	
13		0	
14		0	
15		0	

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OK Cancel Apply



# 3. How to program?

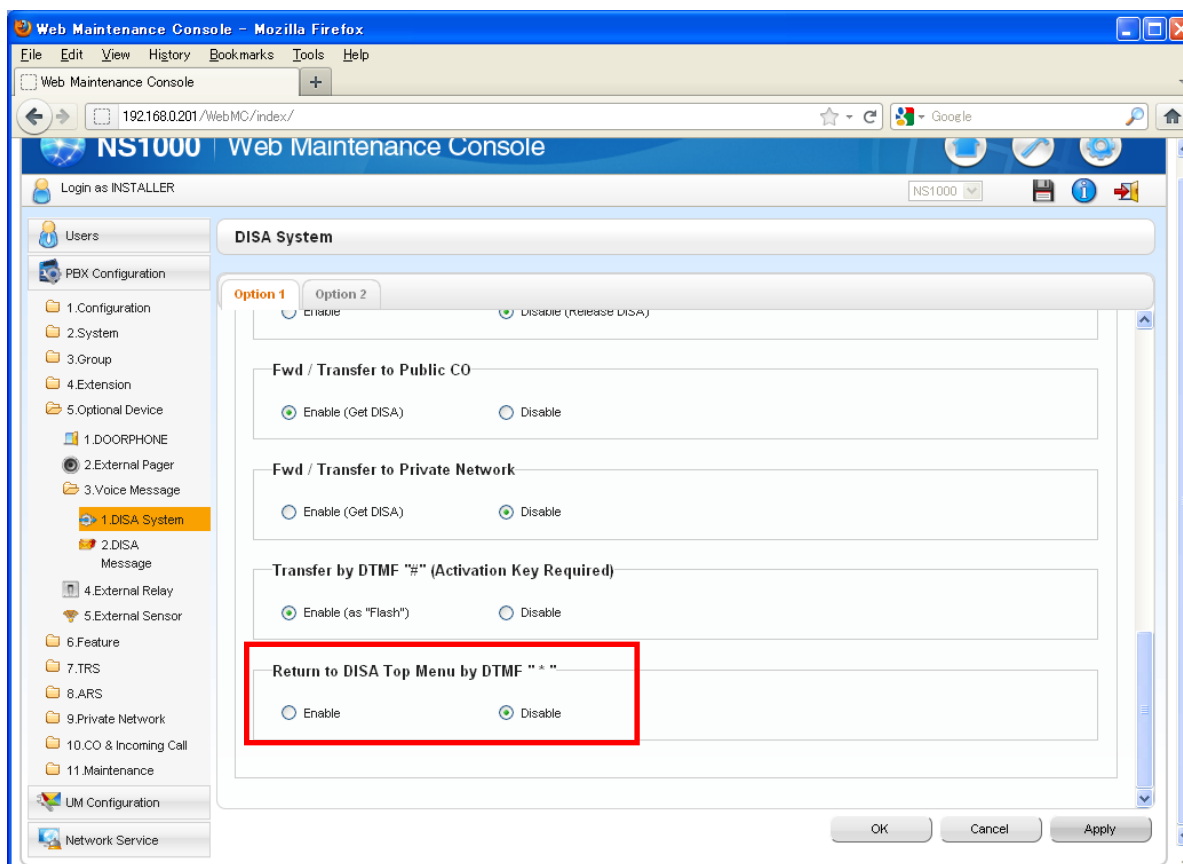


## Meeting using Cellular

### Dialing Plan setting

Setup – PBX Configuration – 5.Optional Device – 1.DISA System – Option1

-> Set “Return to DISA Top Menu by DTMF “\*” ” to “Disable”.



**Thank you !  
The END**