



ศูนย์เทคโนโลยีสารสนเทศและการสื่อสาร สป.มท.  
Information and Communication Technology Center.

**SAMART**

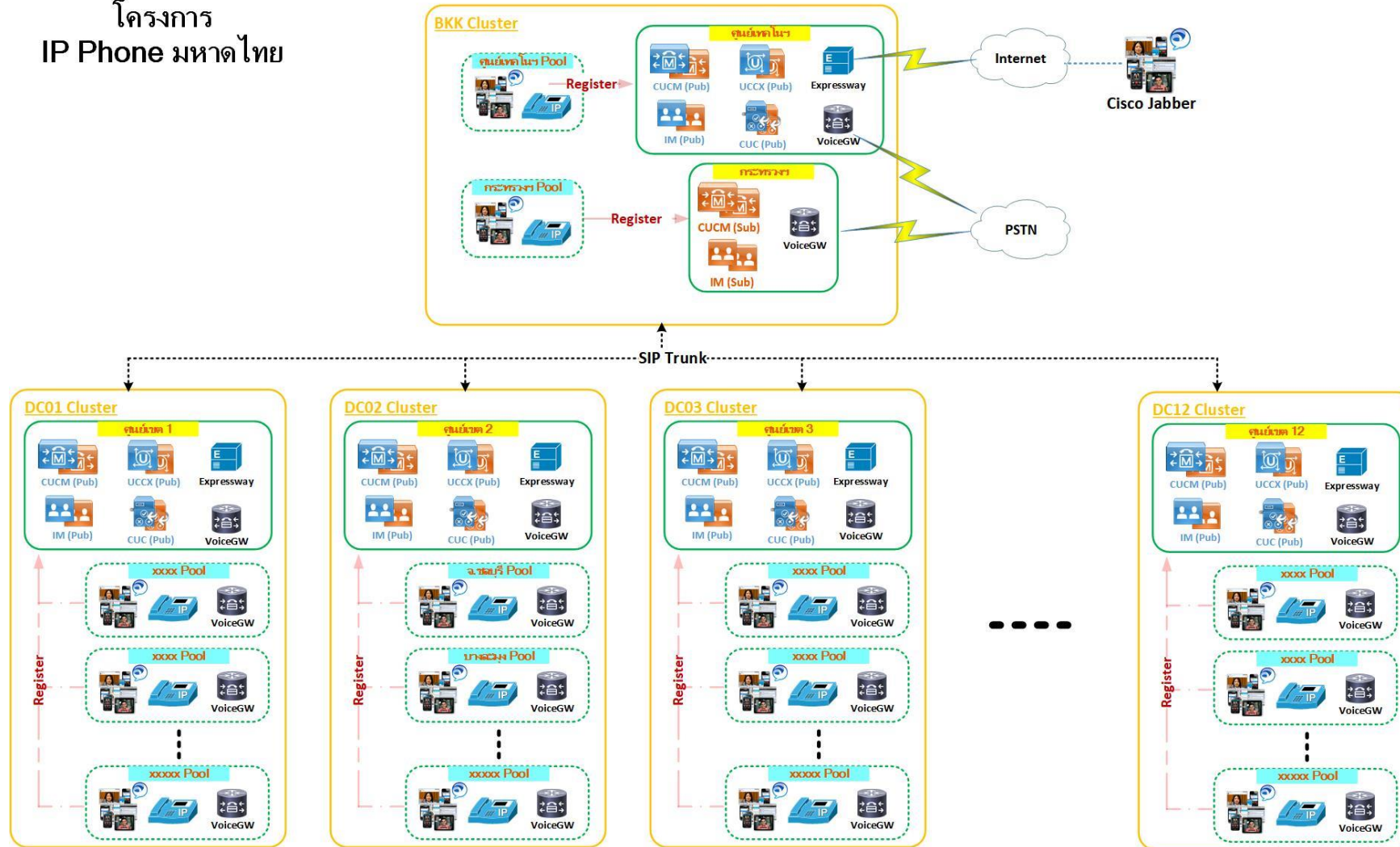
# IP Telephony

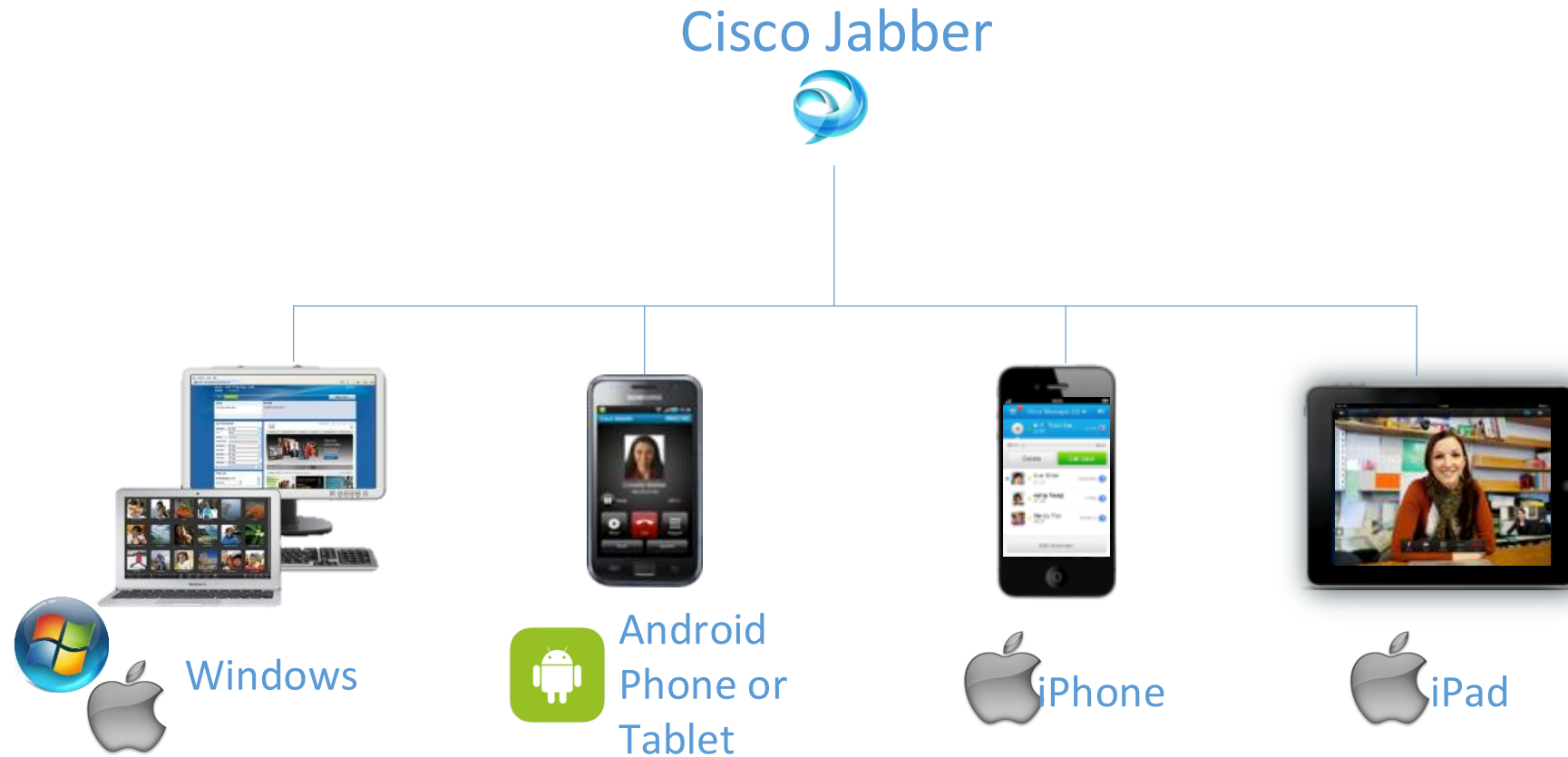
*Add Jabber Android and iOS*

สำนักงานส่งเสริมการค้าในต่างประเทศ  
กรุงเทพฯ

# System Diagram

## โครงการ IP Phone มหาดไทย

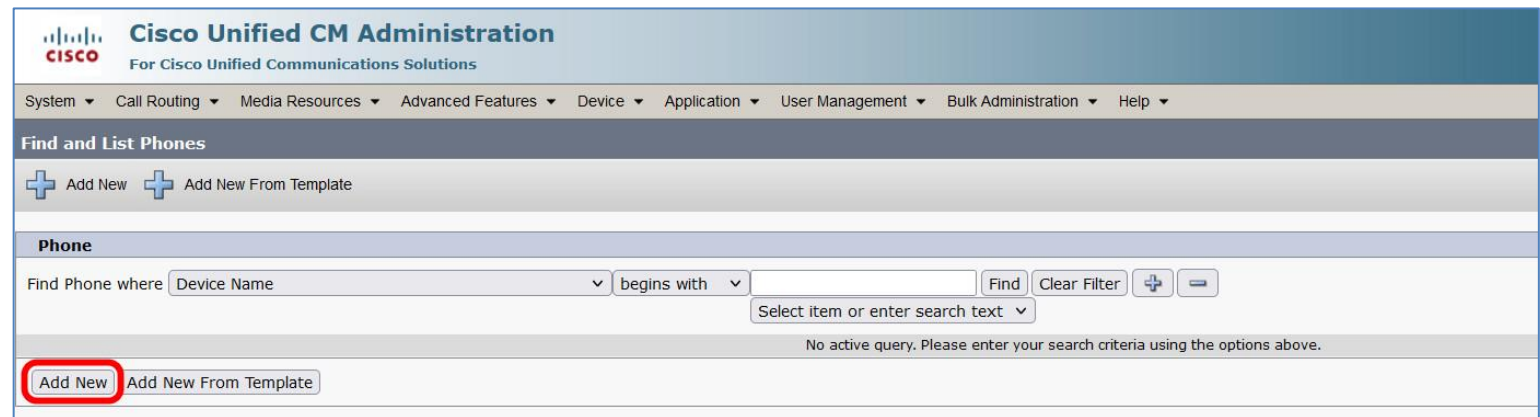
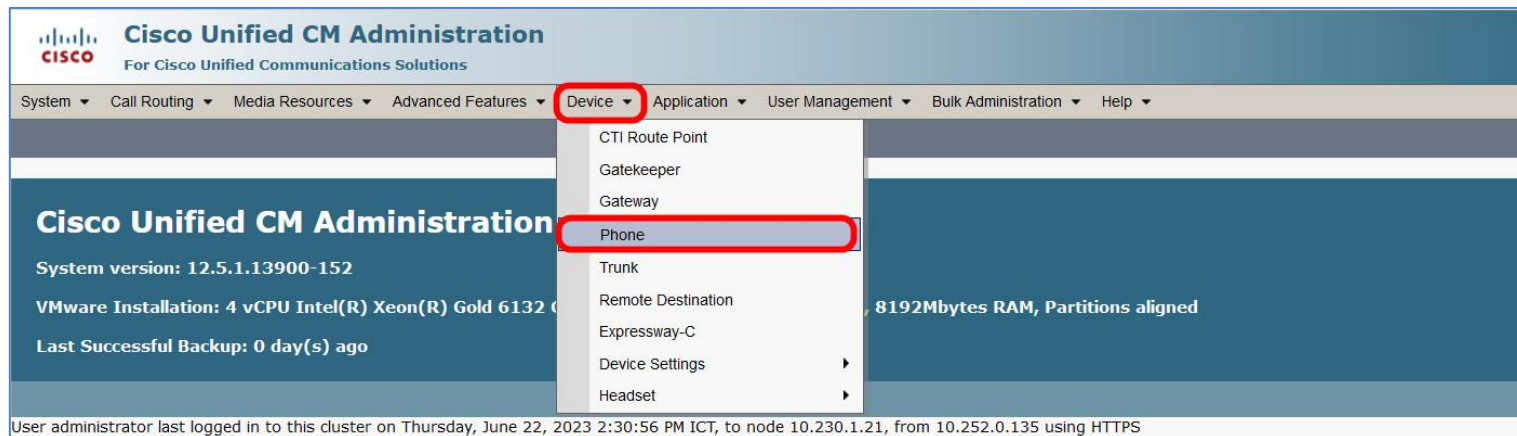






# Add Jabber

- วิธีการเพิ่ม Jabber เข้าไปในระบบฐานข้อมูล Cisco Unified Communication Manager (CUCM) มีดังนี้
  - ไปที่แท็บเมนูเลือก Device/Phone
  - เลือก Add New



- ในช่องของ Phone Type\* ที่จะใช้สำหรับเพิ่ม Jabber Client มีดังนี้
  - กรณีเพิ่ม Jabber Client for Windows/ Mac ให้เลือก Phone Type\* = Cisco Unified ClientServices Framework
  - กรณีเพิ่ม Jabber Client for Android ให้เลือก Phone Type\* = Cisco Dual Mode for Android
  - กรณีเพิ่ม Jabber Client for iPhone ให้เลือก Phone Type\* = Cisco Dual Mode for iPhone
  - กรณีเพิ่ม Jabber Client for iPad/Android Tablet ให้เลือก Phone Type\* = Cisco Jabber for Tablet
  - ดังนั้นในกรณีจึงเลือก Cisco Unified ClientServices Framework และเลือก Next Cisco Unified ClientServices Framework Cisco Unified ClientServices Framework

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Appli

### Add a New Phone

Next

**Status**  
Status: Ready

**Create a phone using the phone type or a phone template**  
Start by selecting the type of phone you wish to add, or [click here to add a new phone](#)

Phone Type\* Cisco Unified Client Services Framework

or

BAT Phone Template\*

Next

\*- indicates required it  
\*\*- Create a phone te

- Cisco Unified Communications for RTX
- Cisco Unified Personal Communicator
- Cisco Webex Board 55
- Cisco Webex Board 70
- Cisco Webex Board 85
- Cisco Webex DX80
- Cisco Webex Desk Pro
- Cisco Webex Room 55
- Cisco Webex Room 55 Dual

- ในช่องของ Phone Type\* ที่จะใช้สำหรับเพิ่ม Jabber Client มีดังนี้
    - กรณีเพิ่ม **Jabber Client for Windows/ Mac** ให้เลือก Phone Type\* = Cisco Unified ClientServices Framework
    - กรณีเพิ่ม **Jabber Client for Android** ให้เลือก Phone Type\* = Cisco Dual Mode for Android
    - กรณีเพิ่ม **Jabber Client for iPhone** ให้เลือก Phone Type\* = Cisco Dual Mode for iPhone
    - กรณีเพิ่ม **Jabber Client for iPad/Android Tablet** ให้เลือก Phone Type\* = Cisco Jabber for Tablet
- จากตัวอย่างเลือก Cisco Unified ClientServices Framework และเลือก Next

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management

### Phone Configuration

Save

#### Device Information

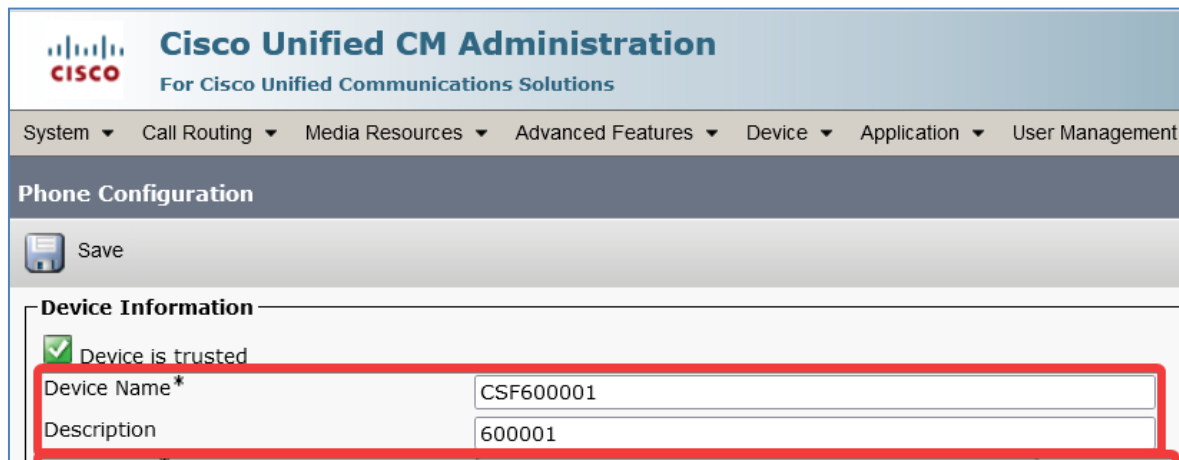
Device is trusted

Device Name*	CSF600001
Description	600001
Device Pool*	01-COPI-DP <a href="#">View Details</a>
Common Device Configuration	< None > <a href="#">View Details</a>
Phone Button Template*	Standard Client Services Framework
Common Phone Profile*	Standard Common Phone Profile <a href="#">View Details</a>
Calling Search Space	01_COPI_class_2
AAR Calling Search Space	< None >
Media Resource Group List	01-COPI-MRGL
User Hold MOH Audio Source	< None >
Network Hold MOH Audio Source	< None >
Location*	Hub_None
AAR Group	< None >
User Locale	< None >
Network Locale	< None >
Built In Bridge*	Default
Privacy*	Default
Device Mobility Mode*	Default
Owner	<input checked="" type="radio"/> User <input type="radio"/> Anonymous (Public/Shared Space)
Owner User ID*	u600001 <a href="#">Find</a>
Mobility User ID	< None >

- เมื่อเข้าสู่หน้าต่าง Phone Configuration และใส่ข้อมูลดังต่อไปนี้

#### Device Information

- Device Name\*
- Description
- Device Pool\*
- Phone Button Template\*
- Calling Search Space\*
- Media Resource Group
- Owner
- Owner User ID\*



The screenshot shows the Cisco Unified CM Administration interface. The top navigation bar includes 'System', 'Call Routing', 'Media Resources', 'Advanced Features', 'Device', 'Application', and 'User Management'. The main content area is titled 'Phone Configuration' and contains a 'Save' button. Below this is the 'Device Information' section, which includes a checked checkbox for 'Device is trusted'. A red box highlights the following fields:

Device Name*	CSF600001
Description	600001

- รายละเอียดเพิ่มเติม ของ Device Information / Device Name\* ต้องใส่คำนำหน้าก่อนดังนี้
  - CSF คือการใช้งานบน Notebook และ MAC Book
  - BOT คือการใช้งานบน Android
  - TCT คือการใช้งานบน iPhone (IOS)
  - TAB หมายถึงการใช้งานบน Tablet (IOS)

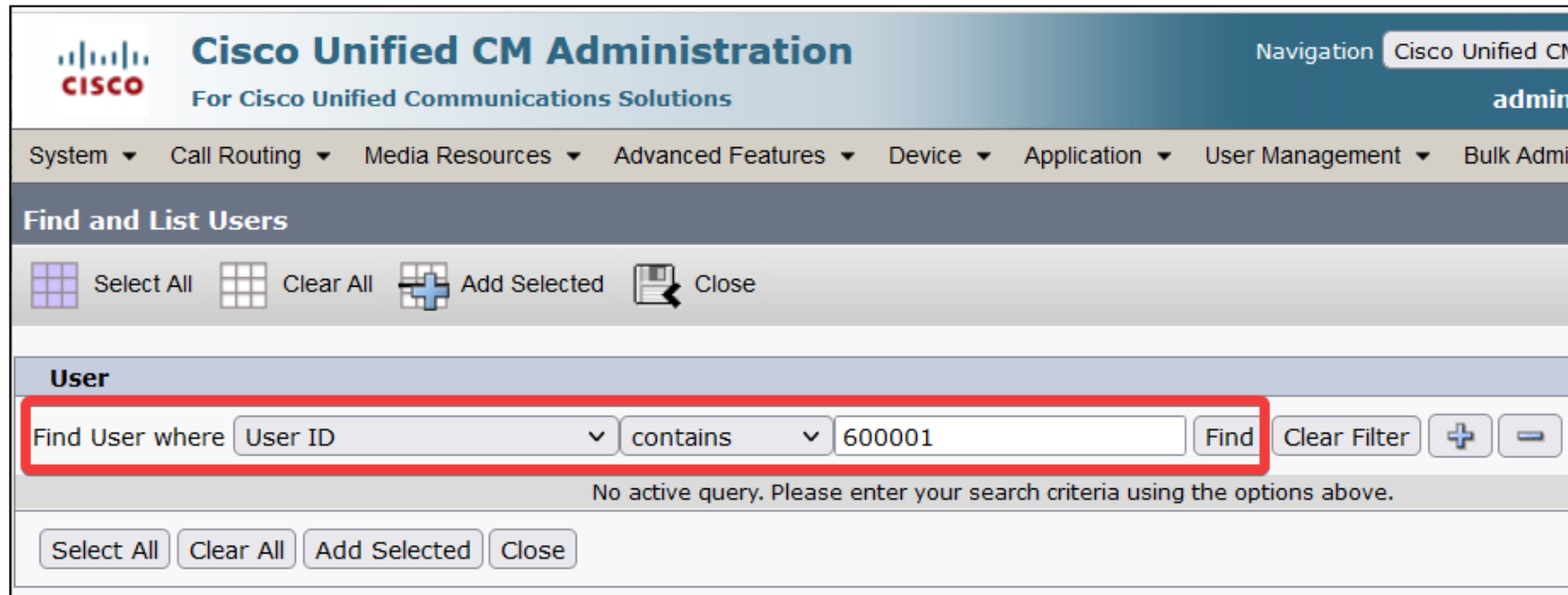


The screenshot shows the Cisco Unified CM Administration interface. The top navigation bar includes System, Call Routing, Media Resources, Advanced Features, Device, Application, and User Management. The main section is titled "Phone Configuration" and contains a "Save" button. Below the button are several configuration fields, each with a dropdown menu:

- User Hold MOH Audio Source: < None >
- Network Hold MOH Audio Source: < None >
- Location\*: Hub\_None
- AAR Group: < None >
- User Locale: < None >
- Network Locale: < None >
- Built In Bridge\*: Default
- Privacy\*: Default
- Device Mobility Mode\*: Default
- Owner:  User  Anonymous (Public/Shared Space)
- Owner User ID\*: [Empty field] **Find**
- Mobility User ID: < None >

- Owner
- Owner User ID\*
- Digest User

หัวข้อ Owner User ID\* และ Digest User ให้เลือก Find เพื่อค้นหา User ID ที่ต้องการให้สามารถ Login เข้าใช้ Jabber ที่กำลังสร้างอยู่



- เมื่อปรากฏหน้าต่าง Find and List Users ให้เลือกข้อมูลดังต่อไปนี้เพื่อค้นหา User ID
  - Find User where: User ID | contains | 600001 (600001 คือหมายเลขเบอร์ติดต่อของ Jabber) และเลือก Find

The screenshot shows the Cisco Unified CM Administration interface. At the top, there is a navigation bar with the Cisco logo and the text "Cisco Unified CM Administration For Cisco Unified Communications Solutions". The user is logged in as "administrator". Below the navigation bar, there is a menu with options like System, Call Routing, Media Resources, etc. The main content area is titled "Find and List Users". It includes a search bar where "User ID" is selected and "contains" is chosen, with the value "600001" entered. Below the search bar, there is a table with columns: User ID, Meeting Number, First Name, Last Name, Department, Directory URI, User Status, and User Rank. The table contains one row with the following data: 

User ID	Meeting Number	First Name	Last Name	Department	Directory URI	User Status	User Rank
<input checked="" type="checkbox"/> u600001			600001			Enabled Local User	1

 The "Add Selected" button is highlighted with a red box. Below the table, there are buttons for "Select All", "Clear All", "Add Selected", and "Close".

- เลือก User ID ที่ปรากฏขึ้นและเลือก Add Selected

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Adminis

**Phone Configuration**

Save

**Protocol Specific Information**

Packet Capture Mode*	None ▾
Packet Capture Duration	0
BLF Presence Group*	Standard Presence group ▾
SIP Dial Rules	< None > ▾
MTP Preferred Originating Codec*	711ulaw ▾
Device Security Profile*	Cisco Unified Client Services Framework - Standard ▾
Rerouting Calling Search Space	< None > ▾
SUBSCRIBE Calling Search Space	< None > ▾
SIP Profile*	MOI CSF SIP Profile ▾ <a href="#">View Details</a>
Digest User	u600001 ▾ <b>Find</b>

Media Termination Point Required  
 Unattended Port  
 Require DTMF Reception

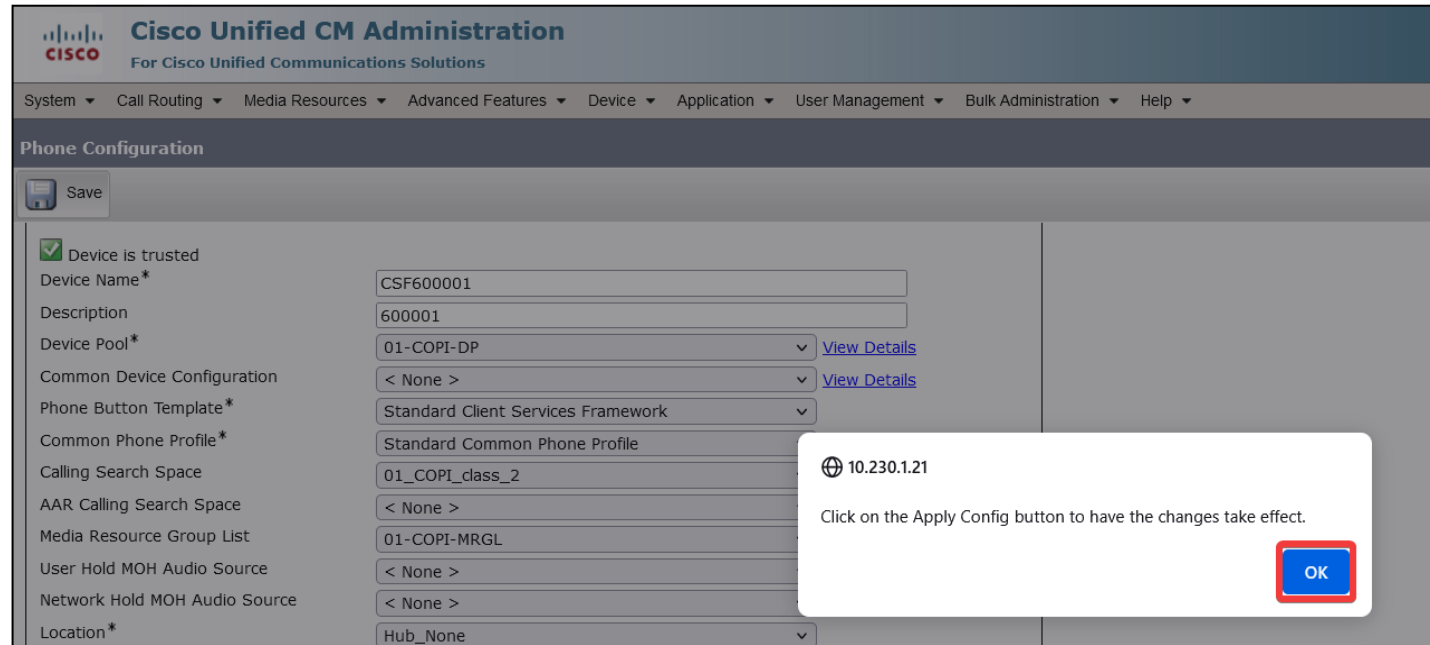
- Protocol Specific Information

Device Security Profile\*

SIP Profile\*

Digest User

ใส่ข้อมูลเรียบร้อยแล้วให้เลือก Save



- เมื่อปรากฏหน้าต่าง Click on the Apply Config button to have the changes take effect. ให้เลือก OK



**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

**Phone Configuration**

Save Delete Copy Reset Apply Config Add New

**Status**  
Add successful

**Association**  
Modify Button Items

1	Line [1] - Add a new DN
2	Line [2] - Add a new DN
3	Line [3] - Add a new DN
4	Line [4] - Add a new DN
5	Line [5] - Add a new DN
6	Line [6] - Add a new DN
7	Line [7] - Add a new DN
8	Line [8] - Add a new DN

**Phone Type**  
Product Type: Cisco Unified Client Services Framework  
Device Protocol: SIP

**Real-time Device Status**  
Registration: Unknown  
IPv4 Address: None

**Device Information**  
 Device is Active  
 Device is trusted  
Device Name\*: CSF600001  
Description: 600001  
Device Pool\*: 01-COPI-DP [View Details](#)

- Association

- เลือก Line [1] – Add a new DN เพื่อเข้าไปกำหนดเบอร์ติดต่อ

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

### Directory Number Configuration

Save Delete Reset Apply Config Add New

**Status**  
Status: Ready

**Directory Number Information**

Directory Number*	600001	<input type="checkbox"/> Urgent Priority
Route Partition	Internal_PT	
Description	600001	
Alerting Name	600001	
ASCII Alerting Name		

- ใส่ข้อมูลดังต่อไปนี้

Directory Number Information

- Directory Number\*

- Route Partition

- Description

-Alerting Name

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾

### Directory Number Configuration

Save Delete Reset Apply Config Add New

#### Directory Number Settings

Voice Mail Profile	00_Voicemail_Profile ▾	(Choose <None>)
Calling Search Space	< None > ▾	
BLF Presence Group*	Standard Presence group ▾	
User Hold MOH Audio Source	< None > ▾	
Network Hold MOH Audio Source	< None > ▾	
Auto Answer*	Auto Answer Off ▾	
Calling Line ID Presentation When Diverted	Determined by Last Hop ▾	

Reject Anonymous Calls

- ใส่ข้อมูลดังต่อไปนี้  
Directory Number Settings  
- Voice Mail Profile

The screenshot shows the Cisco Unified CM Administration interface for Directory Number Configuration. The 'Call Forward and Call Pickup Settings' section is visible, with a table of settings. The 'Calling Search Space' dropdowns are highlighted with a red box, and the 'No Answer Ring Duration (seconds)' field is also highlighted with a red box.

	Voice Mail	Destination	Calling Search Space
Calling Search Space Activation Policy			Use System Default
Forward All	<input type="checkbox"/> or		< None >
Secondary Calling Search Space for Forward All			01_COPI_class_1
Forward Busy Internal	<input type="checkbox"/> or		01_COPI_class_1
Forward Busy External	<input type="checkbox"/> or		01_COPI_class_1
Forward No Answer Internal	<input type="checkbox"/> or		01_COPI_class_1
Forward No Answer External	<input type="checkbox"/> or		01_COPI_class_1
Forward No Coverage Internal	<input type="checkbox"/> or		01_COPI_class_1
Forward No Coverage External	<input type="checkbox"/> or		< None >
Forward on CTI Failure	<input type="checkbox"/> or		< None >
Forward Unregistered Internal	<input type="checkbox"/> or		< None >
Forward Unregistered External	<input type="checkbox"/> or		01_COPI_class_1
No Answer Ring Duration (seconds)		30	
Call Pickup Group		< None >	

- Call Forward and Call Pickup Settings
  - Calling Search Space
  - No Answer Ring Duration (seconds)

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User M...

**Directory Number Configuration**

Save Delete Reset Apply Config Add New

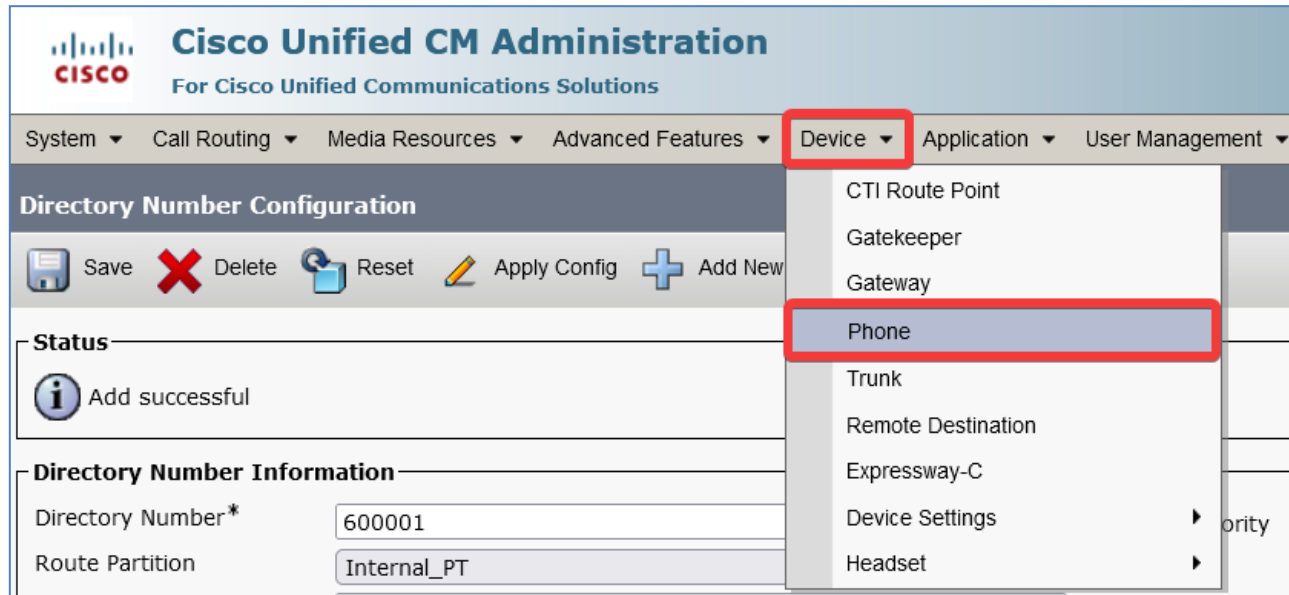
**Line 1 on Device CSF600001**

Display (Caller ID)	600001	Disp
receiving a call may not see the proper identity of the caller.		
ASCII Display (Caller ID)	<input type="text"/>	
Line Text Label	<input type="text"/>	
External Phone Number Mask	<input type="text"/>	
Recording Option*	Call Recording Disabled	▾
Recording Profile	< None >	▾
Recording Media Source*	Gateway Preferred	▾
Monitoring Calling Search Space	< None >	▾

- Line 1 on Device
  - Display (Caller ID)

ใส่ข้อมูลเรียบร้อยแล้วให้กด Save





- วิธีตรวจสอบว่า Jabber ได้ถูกเพิ่มเข้าไปในระบบฐานข้อมูลแล้วหรือไม่สามารถทำได้ดังนี้
  - เลือก Device/Phone

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration | Go  
administrator | About | Logout

System | Call Routing | Media Resources | Advanced Features | Device | Application | User Management | Bulk Administration | Help

**Find and List Phones** | Related Links: Actively Logged In Device Report | Go

+ Add New | + Add New From Template | Select All | Clear All | Delete Selected | Reset Selected | Apply Config to Selected | Generate PRT for Selected

**Status**  
1 records found

**Query Information**  
Searching on a directory number may show the same device name multiple times depending on the number of lines configured per device.

**Phone (1 - 1 of 1)** | Rows per Page: 50

Find Phone where: Directory Number | contains | 600001 | Find | Clear Filter

Device Name(Line)	Description	Device Pool	Extension	Partition	Device Protocol	Status	Last Registered	Last Active	Unified CM	IPv4 Address	Copy	Super Copy
CSF600001(1)	600001	01-COPI-DP	600001	Internal_PT	SIP	None	Never			None		

Add New | Add New From Template | Select All | Clear All | Delete Selected | Reset Selected | Apply Config to Selected | Generate PRT for Selected

- เมื่อเข้าสู่หน้าต่าง Find and List Phone ให้ใส่ข้อมูลดังต่อไปนี้
  - Find Phone where : Directory Number | Contains | 600001 (600001 คือหมายเลขติดต่อ Jabber) และเลือก Find ก็จะทำให้ปรากฏ Jabber ที่เพิ่มเข้าไปในระบบฐานข้อมูล

- กำหนด Device Association ให้กับ User โดยเลือก User Management > End User

The screenshot shows the Cisco Unified CM Administration web interface. The navigation menu is open, and 'End User' is selected under the 'User Management' dropdown. The main content area displays system information such as 'System version: 12.5.1.13900-152' and 'VMware Installation: 4 vCPU Intel(R) Xeon(R) Gold 6132 CPU @ 2.60GHz, disk 1:'. Below this, there is a status message: 'User administrator last logged in to this cluster on Monday, September 11, 2023 11:08:34 AM ICT, to node 10.230.1.21, from 10.252.0.133 using HTTPS'. At the bottom, there are copyright notices and links to external resources like 'Export Compliance Product Report', 'Unified Communications System Documentation', and 'Technical Support'.

- ใส่ User ID ลงในช่องค้นหาและเลือก Find

The screenshot shows the 'Find and List Users' interface in Cisco Unified CM Administration. The search criteria are set to 'User ID contains u50441'. The 'Find' button is circled in red. Below the search bar, there is a message: 'No active query. Please enter your search criteria using the options above.'

- เลือก User ID

The screenshot shows the search results for the query 'User ID contains u50441'. One record is found. The 'User ID' column in the table is highlighted with a red circle.

	User ID ^	Meeting Number	First Name	Last Name	Department	Directory URI	User Status	User Rank
<input type="checkbox"/>	u50441	50441		50441			Enabled Local User	1

- ที่หัวข้อ Device Information ให้เลือก Device Association

The screenshot shows the Cisco Unified CM Administration web interface. At the top, there is a navigation bar with the Cisco logo and the text 'Cisco Unified CM Administration For Cisco Unified Communications Solutions'. The user is logged in as 'administrator'. Below the navigation bar, there is a breadcrumb trail: System > Call Routing > Media Resources > Advanced Features > Device > Application > User Management > Bulk Administration > Help. The main content area is titled 'End User Configuration' and includes a 'Presence Viewer for User' section with a dropdown menu set to 'MOI-ServiceProfile' and a 'View Details' link. Below this, the 'Device Information' section is visible, containing three input fields: 'Controlled Devices' (containing 'BOT50441'), 'Available Profiles', and 'CTI Controlled Device Profiles'. A red box highlights the 'Device Association' button, which is labeled 'Line Appearance Association for Presence'.



- ที่หัวข้อ Device Information ให้เลือก Device Association

The screenshot shows the 'Device Information' section of the Cisco Unified CM Administration interface. The 'Controlled Devices' field contains 'BOT50441'. A red circle highlights the 'Device Association' button, which is labeled 'Line Appearance Association for Presence'.

- ใส่ข้อมูลที่ต้องการค้นหา เช่น Directory Number และเลือก Find

The screenshot shows the 'User Device Association' page. The search criteria are set to 'Directory Number' contains '50441'. The 'Find' button is highlighted with a red circle. Below the search bar is a table of associated devices.

<input type="checkbox"/>		Device Name	Directory Number	Description
<input checked="" type="checkbox"/>		SEP045FB90F91C0	50441	50441
<input type="checkbox"/>		AN1CB0CB9E20000	53123	moi-voip-vg202xm23

- คลิกเครื่องหมายถูกที่หน้าข้อมูลที่ปรากฏ และเลือก Save Selected/Changes

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration Go  
administrator | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

User Device Association Related Links: Back to User Go

Select All Clear All Select All In Search Clear All In Search Save Selected/Changes

User Device Association For u50441 (1 - 2 of 2) Rows per Page 50

Find User Device Association where Directory Number contains 50441 Find Clear Filter + -

Show the devices already associated with u50441

<input type="checkbox"/>	Device Name	Directory Number	Description
<input checked="" type="checkbox"/>	SEP045FB90F91C0	50441	50441
<input type="checkbox"/>	BOT50441	50441	50441

Select All Clear All Select All In Search Clear All In Search Save Selected/Changes

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration Go  
administrator | About | Logout

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

User Device Association Related Links: Back to User Go

Select All Clear All Select All In Search Clear All In Search Save Selected/Changes

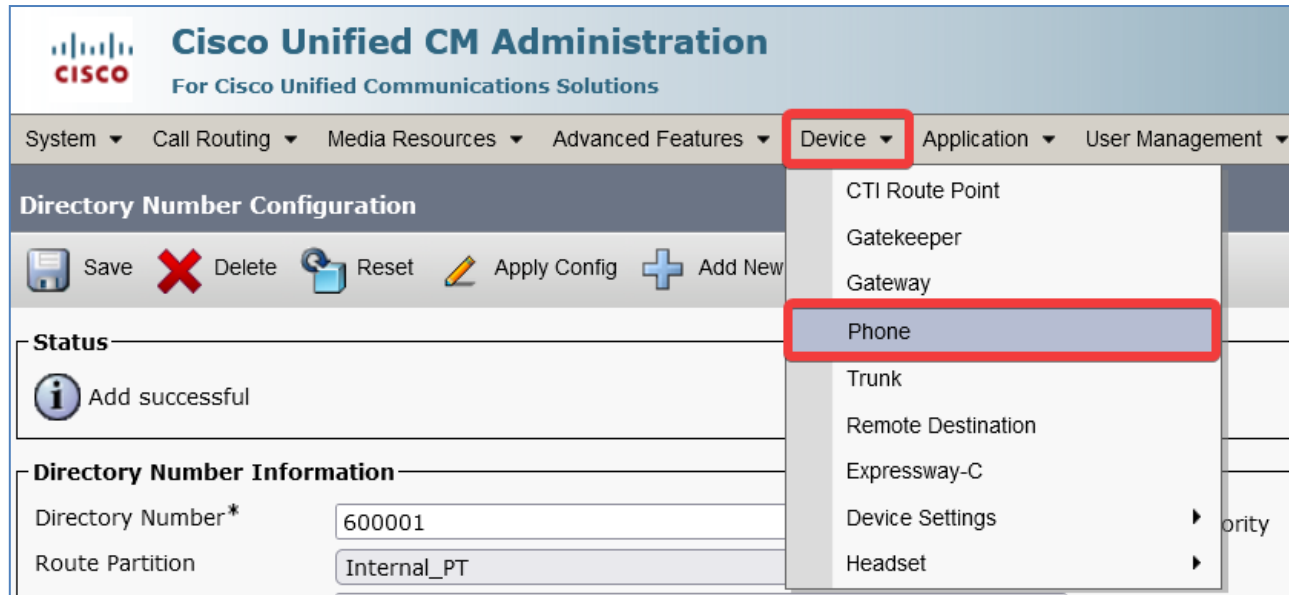
User Device Association For u50441 (1 - 2 of 2) Rows per Page 50

Find User Device Association where Directory Number contains 50441 Find Clear Filter + -

Show the devices already associated with u50441

<input type="checkbox"/>	Device Name	Directory Number	Description
<input checked="" type="checkbox"/>	SEP045FB90F91C0	50441	50441
<input checked="" type="checkbox"/>	BOT50441	50441	50441

Select All Clear All Select All In Search Clear All In Search Save Selected/Changes



- วิธีลบ Jabber ที่มีในระบบฐานข้อมูลสามารถทำได้ดังนี้
  - เลือก Device/Phone

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

Navigation: Cisco Unified CM Administration | Go  
administrator | About | Logout

System | Call Routing | Media Resources | Advanced Features | Device | Application | User Management | Bulk Administration | Help

**Find and List Phones** | Related Links: Actively Logged In Device Report | Go

+ Add New | + Add New From Template | Select All | Clear All | Delete Selected | Reset Selected | Apply Config to Selected | Generate PRT for Selected

**Status**  
1 records found

**Query Information**  
Searching on a directory number may show the same device name multiple times depending on the number of lines configured per device.

**Phone (1 - 1 of 1)** | Rows per Page 50

Find Phone where: Directory Number | contains | 600001 | Find | Clear Filter | Select item or enter search text

	Device Name(Line) ^	Description	Device Pool	Extension	Partition	Device Protocol	Status	Last Registered	Last Active	Unified CM	IPv4 Address	Copy	Super Copy
<input type="checkbox"/>	<a href="#">CSF600001(1)</a>	600001	01-COPI-DP	600001	Internal_PT	SIP	None	Never			None		

Add New | Add New From Template | Select All | Clear All | Delete Selected | Reset Selected | Apply Config to Selected | Generate PRT for Selected

- เมื่อเข้าสู่หน้าต่าง Find and List Phone ให้ใส่ข้อมูลดังต่อไปนี้
  - Find Phone where : Directory Number | Contains | 600001 (600001 คือหมายเลขติดต่อ Jabber) และเลือก Find ก็จะปรากฏ Jabber ที่เพิ่มเข้าไปในระบบฐานข้อมูล





ศูนย์เทคโนโลยีสารสนเทศและการสื่อสาร ส.ป.ม.ท.  
Information and Communication Technology Center.

**SAMART**

Thanks and Regards.

สำนักงานปลัดกระทรวงดิจิทัลฯ