

SCOPSERV
INTERNATIONAL INC.

ScopTEL™ IP PBX Software

Fixed Mobile Convergence and Follow Me



Description: Fixed Mobile Convergence

- ScopTEL Fixed Mobile Convergence allows a supported SIP Desk phone to hand a call off to a mobile device
- ScopTEL Fixed Mobile Convergence also allows a mobile device to hand a call off to a ScopTEL extension or external number using PBX resources
- Supported SIP desk phones are:
 - Aastra 9000i release 3.3.1 firmware or higher
 - Polycom Sound Point IP release 3.2.x firmware or higher
 - Yealink release 70 firmware or higher
- Supported Mobile Android/iOS soft clients are:
 - CounterPath Bria
 - Media5-fone
 - Zoiper
- Mobile devices do not require the installation of a soft client but the soft client can greatly reduce cellular charges
 - Mobile device PBX integration is supported by ScopTEL CoS configurations and DTMF codes
- Minimum ScopTEL Telephony release 5.8.5.1.20141109





Description: Follow Me

- “Twinning” aka “One Number” requires the extension to have ScopTEL’s “Follow Me” configured and Immediate Call Forward to Follow Me enabled on a per extension basis.
- Follow Me is used to ring one or more extensions and or external numbers either in sequence (serialized) or in parallel (forked).
- Follow Me is used in conjunction with Fixed Mobile Convergence handoffs to provide a single point of contact for any configured extension





Before you begin

- Decide where the Fixed Mobile Conference feature will handoff an active call when used.
- Decide whether to FMC Conference or FMC transfer the call when the Fixed Mobile Convergence Feature is used. FMC Conference is recommended as this will invoke an attended conference to the pre-configured destination.
- Provision the Yealink phone in the ScopTEL Automatic Provisioning System.
- Decide whether to use Follow Me for Mobile Twinning or just use the FMC handoff capabilities. The Walkthrough will break down FMC features Vs. Follow Me/One Number features.



Walkthrough Yealink FMC Conference

- You can set up as many FMC destinations as there are unused DSS Keys.
- Navigate to Telephony>Provisioning>Yealink>DSS Keys and edit a Line or Memory Key as follows.
- Enter a custom label and in the Destination /Value field enter the phone number or extension you wish to use.

The screenshot displays the ScopTEL IP PBX web interface. The left sidebar shows the navigation tree with 'Provisioning' highlighted. The main content area is titled 'Phone Provisioning' and includes tabs for General, Provisioning, Server, Network, Date and Time, Phone Options, PBX Services, DSS Keys (which is active and highlighted with a red box), Programmable Keys, Audio/Volume, and LCD Display. Below the tabs, the 'Deal Type' is set to 'Blind Transfer'. The 'Line Keys' section contains five rows for configuring keys. Key 4 is highlighted with a red box and configured as follows: Key 4: KeyEvent, Label: FMC-Cell, Mode: FMC Conference, and Extension/Value: 9055551212.

Key	Type	Label	Line	Extension/Value
Key 1	Line		Automatic	
Key 2	Speed Dial	Login	Automatic	*S0
Key 3	Speed Dial	Pause	Automatic	*S1
Key 4	KeyEvent	FMC-Cell	FMC Conference	9055551212
Key 5	Speed Dial			

Walkthrough Polycom FMC Conference

- You can set up as many FMC destinations as Polycom EFK buttons.
- Navigate to Telephony>Provisioning>Polycom and enable EFK support as follows.

The screenshot displays the ScopServ web interface. On the left is a navigation tree with the following items: ScopServ, Configuration, Server, Network, Telephony, General, Configuration Manager, Extensions, Lines, Interfaces, Virtual Fax, Queues and Agents, Applications, Provisioning (highlighted with a red box), Audio, Miscellaneous, Import/Export, ScopSTATS, Third Party Reports, Tools, Organizing, Administration, Options, Configuration Wizard, and Log out. The main content area is titled 'Auto Provisioning System (APS): Phone Provisioning'. It has tabs for Phone Provisioning, Gateway Provisioning, and Firmware. Under 'Phone Provisioning', there are sub-tabs: General, Provisioning, Lines, Soft Key (highlighted with a red box), EFK, Servers, Network, and Options. The 'Soft Key' tab is active, showing a configuration for 'Key 2'. A checkbox 'Enable Enhanced Function Key (EFK) support?' is checked and highlighted with a red box. Below this, the configuration for 'Key 2' is shown: 'Speed Dial' is selected, 'First Name' is 'PAGE', 'Last Name' is empty, 'Destination' is '*830', and 'Buddy Watch' is 'Default: True'. Below this, the configuration for 'Key 3' is shown: 'Feature' is selected, 'Label' is 'Login', 'Feature' is 'Agent Login (*900)', and 'Key 4' is shown: 'Feature' is selected, 'Label' is 'Pause', 'Feature' is 'Agent Pause (*901)'. Finally, the configuration for 'Key 5' is shown: 'Speed Dial' is selected, 'First Name' is '213', 'Last Name' is empty, and 'Destination' is '213'.

Walkthrough Polycom FMC Conference

- Choose the FMC Conference function from the Features drop list.
- Edit the Destination/Value field enter the phone number of extension you wish to use.

Logged as: admin

ScopServ

Configuration

Server

Network

Telephony

General

Configuration

Manager

Extensions

Lines

Interfaces

Virtual Fax

Queues and Agents

Applications

Provisioning

Audio

Miscellaneous

Import/Export

ScopSTATS

Third Party Reports

Tools

Organizing

Administration

Options

Configuration Wizard

Log out

Auto Provisioning System (APS): Phone Provisioning

Network Auto-Discovery (Scan)

Phone Provisioning

Gateway Provisioning

Firmware

Phone Provisioning

General

Provisioning

Lines

Soft Key

EFK

Servers

Network

Options

Date and Time

User Preferences

Audio/RingTone

LDAP

Custom Key Definition: EFK Custom Key configuration is detailed in Polycom admin guide 3.1 or higher.
Example 1: If you want to send DTMF=1234 on active line use syntax '1234\$Tdtmf' omitting quotes.
Example 2: If you want to dial digits=1234 on a new line and place current call on hold use syntax '1234\$TreferS' omitting quotes.

Key 1 [2]: Feature [v]

* Feature [2]: One Touch Park [v]

Key 2 [2]: Feature [v]

* Feature [2]: Transfer To Voicemail [v]

Key 3 [2]: Feature [v]

* Feature [2]: Conference Group [v]

Key 4 [2]: Feature [v]

* Feature [2]: Direct Intercom [v]

Key 5 [2]: Feature [v]

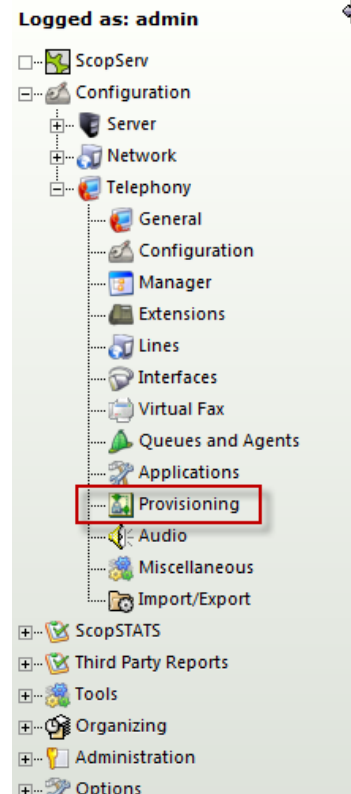
* Feature [2]: FMC Conference [v]

Destination/Value: 9055551212

Key 6 [2]: Feature [v]

Walkthrough Aastra FMC Conference

- Edit a Soft Key button and select FMC Conference From the drop list.
- Edit the Label as necessary and in the Destination/Value field enter the phone number of extension you wish to use.



Defining Class of Service for the Outgoing Line(s)

The Destination/Value you entered into the FMC Conference button will do a Class of Service lookup based on the extension's Class of Service assignment. If the configured CoS does not include a matching Outgoing Line the call will fail. This is a security enhancement, so you must use a CoS that allows the call to complete based on Local Vs. National LD, Vs International Calling Patterns.

Logged as: admin

- ScopServ
 - Configuration
 - Server
 - Network
 - Telephony
 - General
 - Configuration
 - Manager
 - Extensions**
 - Lines
 - Interfaces
 - Virtual Fax
 - Queues and Agents
 - Applications
 - Provisioning
 - Audio
 - Miscellaneous
 - Import/Export
 - ScopSTATS
 - Tools
 - Organizing
 - Administration
 - Options
 - Configuration Wizard
 - Log out

Extensions Manager: Phones

Phones | Extension Groups | Pickup Groups | Speed Dial | Directory | Security (ACL) | Hints (Subscribe)

Templates: [1 to 1 of 1] (License Maximum: 11 of 25)

Search: Search

Name	Type	Description
yealinkh264	SIP (UDP,TCP)	

Action: - select an action -

Phones: [1 to 11 of 11] (License Maximum: 11 of 25)

Search: Search

Extension	Name	Description	Template	Type	Class of Service	Language
8000	8000			SIP (UDP)	default	English (De)
8001	8001			SIP (UDP)	default	English (De)
8002	8002			SIP (UDP)	default	English (De)
8003	8003			SIP (UDP)	default	English (De)
8005	Extension 8005			SIP (UDP)	default	English (De)
8006	Extension 8006			SIP (UDP)	default	English (De)
8007	Extension 8007			SIP (UDP)	default	English (De)
8008	Extension 8008			SIP (UDP)	default	English (De)
8009	Extension 8009			SIP (UDP)	default	English (De)
8010	Extension 8010			SIP (UDP,TCP)	default	English (De)
8011	Extension 8011		yealinkh264	SIP (UDP,TCP)	default	English (De)

Editing Class of Service

- Edit the assigned Class of Service if necessary to set the security policy for the extension by choosing which Outgoing Lines the Class of Service will have access to.
- Also ensure that Blind and Attended transfer Feature Codes are allowed in the Services tab.
- NOTE: Any other 'Live' Feature code included in this CoS will also be allowed (recording etc.).

Logged as: admin

ScopServ

- Configuration
 - Server
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 - General
 - Configuration
 - Manager
 - Extensions
 - Lines
 - Interfaces
 - Virtual Fax
 - Queues and Agents
 - Applications
 - Provisioning
 - Audio

Telephony Manager: Class of Service

Multi Tenants | **Class of Service** | Scheduler | Holidays

Class of Service: (1 to 3 of 3)

Search: Search

Name	Description	Services	Applications	Outgoing Lines	Schedule	Tenant
default	default	All Services	All Applications	All Outgoing Lines	default	default
incoming				All Incoming Lines	default	default
outgoing				All Outgoing Lines	default	default

Action: - select an action -

Columns to display: Select

Verifying the Feature Codes used for Remote transfers

The Blind and Attended transfer feature codes are used to transfer a call back to the ScopTEL server once it is answered by a remote cell phone or land line. By dialing either code from a cell phone or land line phone keypad, the server will do another Class of Service lookup and allow the cell phone or land line to transfer the active call to another extension or external number for handoff. When either code is successful you will hear a prompt to enter additional digits.

The screenshot displays the ScopTEL Configuration web interface. On the left is a navigation tree with 'Configuration' selected. The main panel shows the 'Features Code' tab. Under the 'General' section, there are settings for 'Number of seconds to wait between digits when transferring a call' (3), 'Maximum time between digits for feature activation (in ms)' (500), and 'Timeout for answer on Attended Transfer' (15). The 'Incoming Call Access Codes' section lists various codes like 'Do Not Disturb: *78 / *79', 'Out of Office (DND): Disable', 'Call Forward - Always: *72 / *73', 'Call Forward - Busy: Disable', 'Call Forward - No Answer: Disable', 'Express Messaging / Send Voicemail: *980', 'Call Pickup: *8', 'Directed Pickup: *4', and 'Blacklist Number: Disable'. The 'Calls Transfer' section at the bottom shows 'Blind Transfer: *1' and 'Attended Transfer: *2' highlighted with red boxes.

Logged as: admin

Configuration

General

You can override default settings for each tenant(s) in Manager -> Tenant.

General

Number of seconds to wait between digits when transferring a call: 3 (Default: 3)

Maximum time between digits for feature activation (in ms): 500 (Default: 500)

Timeout for answer on Attended Transfer: 15 (Default: 15)

Incoming Call Access Codes

Do Not Disturb: *78 / *79

Out of Office (DND): Disable

Call Forward - Always: *72 / *73

Call Forward - Busy: Disable

Call Forward - No Answer: Disable

Express Messaging / Send Voicemail: *980

Call Pickup: *8

Directed Pickup: *4

Blacklist Number: Disable

Calls Transfer

Blind Transfer: *1

Attended Transfer: *2

Transfer/Ring Back: Disable

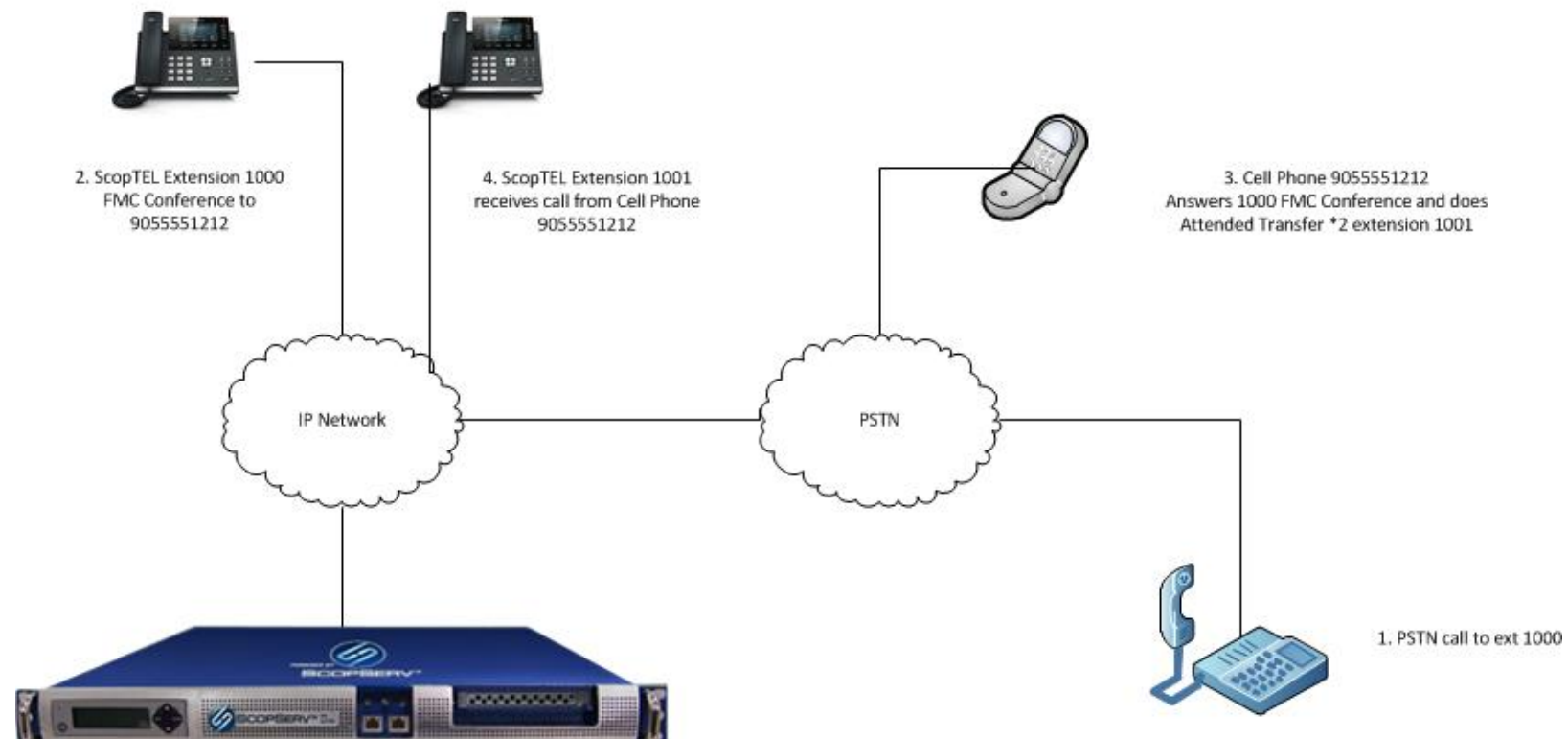


FMC Conference Usage

- Once the phone is provisioned with the new buttons you can press the FMC Conference button(s) on a live call to invite the pre-programmed destination to the call.
- If the destination is a cell phone for example your cell phone will ring and you can answer. Once you have answered with the cell phone you can hang up your desk phone without disconnecting your party.
- To transfer the active call from either a cell phone or land line phone using the default DTMF Transfer codes.
 - Dial *1 to execute a blind transfer to a local extension or another phone number.
 - Dial *2 to execute an attended transfer to a local extension or another phone number.



FMC Conference Usage



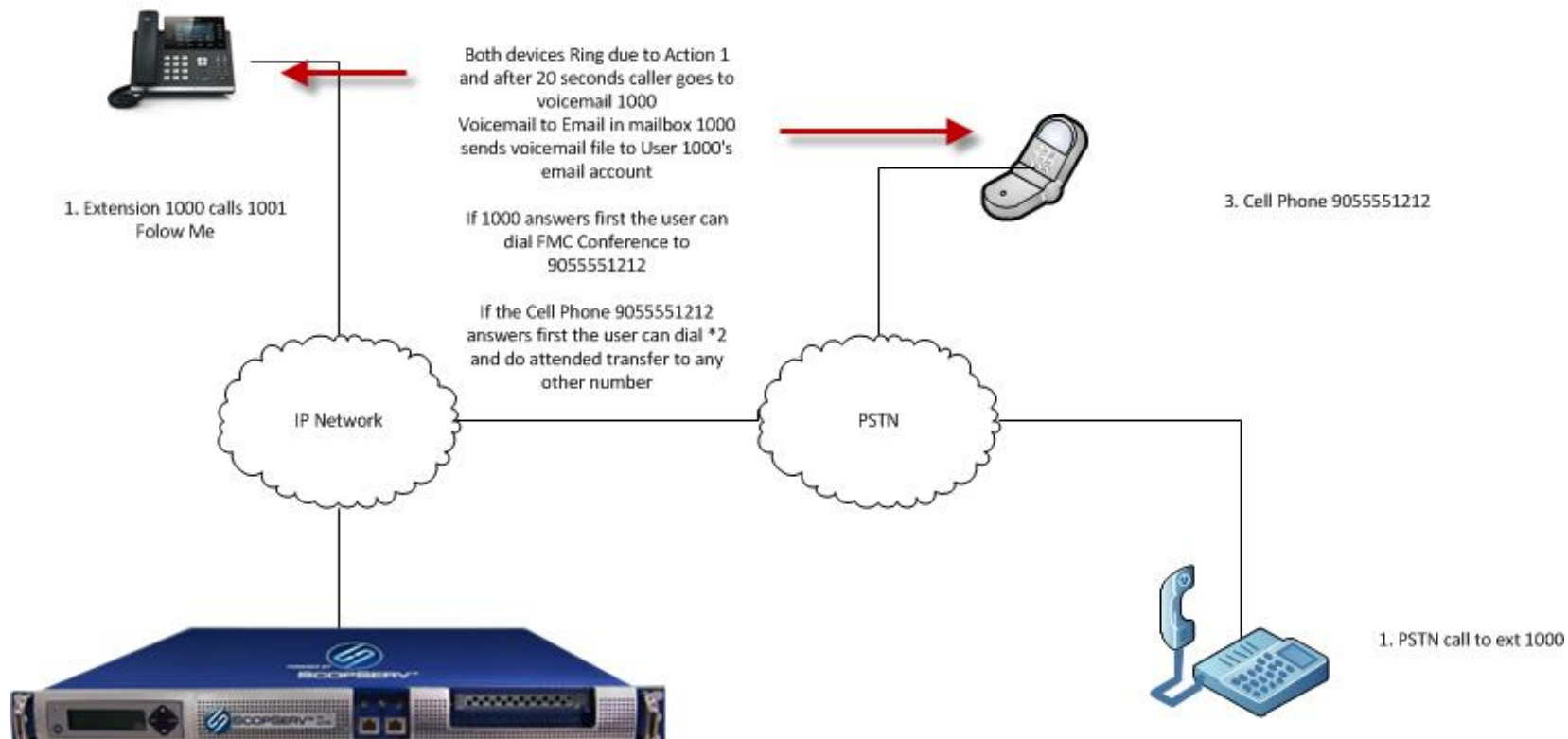


Follow Me/Find Me aka 'One Number' Overview

- If you set an extension's User Options to allow Follow Me permissions and set the Immediate Call Forward destination to Follow Me then whatever dials that extension will execute the rules defined on the Follow Me tab.
- A Follow Me tab consists of 10 possible Actions.
- Each Action can dial multiple destinations in parallel (call forking) and you can set a maximum ring time before executing the next Action.
- After each Action executes it moves on to execute the next defined Action in the list, unless the last Action executed does a hang-up or sends a caller to a voicemail box(es) or rings busy etc. If another Action is not possible then the list will not display a following Action.
- This makes it possible to ring a desk phone, soft phone, cell phone, land line simultaneously or in sequence until one device answers and if unanswered a final destination must be defined.
- If a desk phone answers the call first the user can execute a FMC Conference to send the caller to a pre-configured destination. Once an external number answers the call the user can blind or attended transfer the call elsewhere. If a soft phone answers the call first the user can execute a conference call to another number and the soft phone still has access to any 'Live' feature code.



Follow Me/Find Me aka 'One Number' Example with FMC



Follow Me/Find Me aka 'One Number' Walkthrough

- Edit an extension and click on the User Options tab to Enable Follow Me.
- Change the Immediate Call Forward Destination to Follow Me (later on the user can execute the Call Forward Always feature code (from the Features Code section) to enable or disable this feature).

The screenshot displays the 'Extensions Manager: Phones' interface. On the left, a navigation tree shows 'Extensions' highlighted. The main panel shows the 'User Options' tab for a specific phone. The 'Enable 'Follow Me'' checkbox is checked. Below it, the 'Immediate Call Forward' dropdown menu is set to 'Follow Me'. Other options like 'Call Forward on Busy', 'Call Forward on In Use', and 'Call Forward on No Answer' are also visible, all set to 'None'.

Logged as: admin

Extensions Manager: Phones

Phones | Extension Groups | Pickup Groups | Speed Dial | Directory | Security (ACL) | Hints (Subscribe)

Phones

General | Authentication | Voicemail | Phone Options | Caller ID | **User Options** | Follow Me | Identity | Web

Enable 'Follow Me' ☒ If enabled, you will be able to use 'Follow Me' as destination in Call Forward.

Enable 'Personal IVR' ☐ If enabled, you will be able to use 'Personal IVR' as destination in Call Forward.

Enable 'Personal ACD' ☐ If enabled, you will be able to use 'Personal Queue (ACD)' as destination in Call Forward.

Enable 'Camp-On' ☐ If enabled, you will be able to use 'Camp-On' as destination in Call Forward.

Enable 'Calendar' integration? ☐ Hide user from Company Directory?

Call Forwarding

Play Busy Tone on Call Forward? ☐

Immediate Call Forward Default: none

Call Forward on Busy Default: none

Call Forward on In Use Default: none

Call Forward on No Answer Default: none

Follow Me/Find Me aka 'One Number' Walkthrough

- Set Action 1 destinations using the Action 1 Select button.
- Allow Call Transfers in one or more directions.
- Set the CoS to define which CoS will be used for the Outgoing Call.
- Set the Maximum Ring Time to 20 Seconds.
- Set Action 2 to Voicemail 1000 using the Action 2 Select button.

Logged as: admin

ScopServ
Configuration
Server
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Import/Export
ScopSTATS
Tools
Organizing
Administration
Options
Configuration Wizard
Log out

General Authentication Voicemail Phone Options Caller ID User Options **Follow Me** Identity Web Authentication

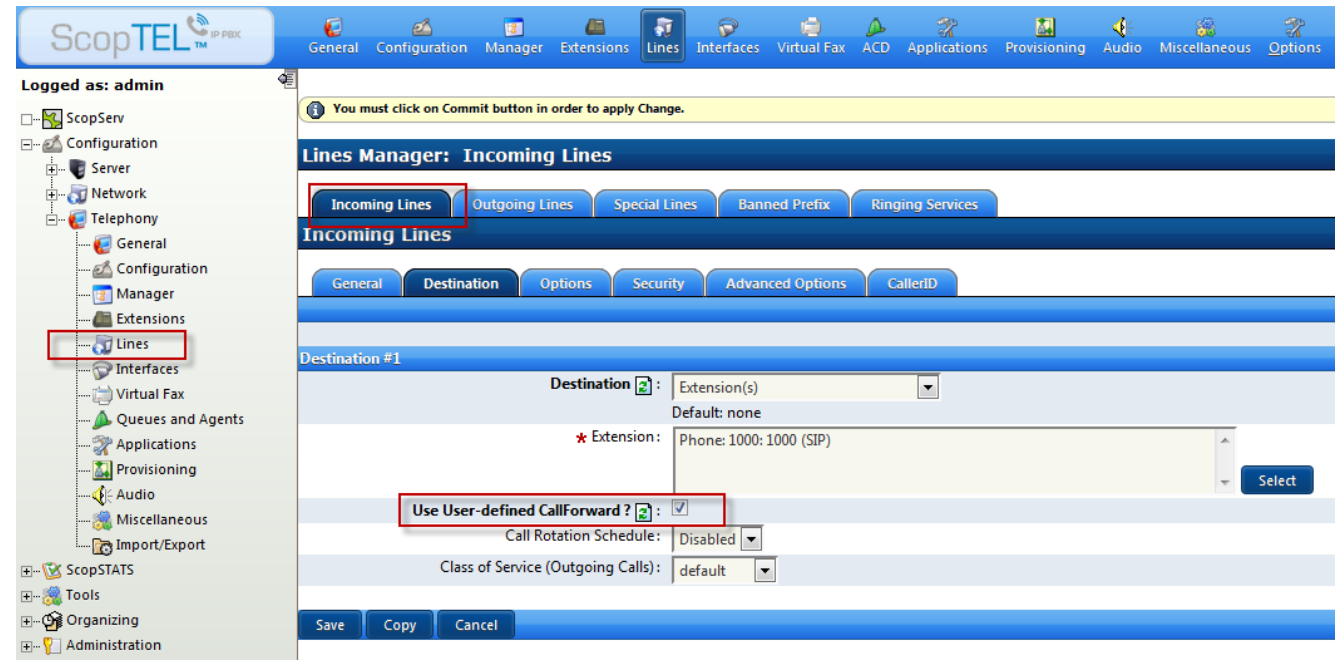
Action 1 : Extension(s) and/or External Number
* Extension: 9055551212
Phone: 1000: 1000 (SIP)
Select

Use User-defined CallForward ?
Call Rotation Schedule: Disabled
Allow Call Transfer: Callee
Default: none
Continue execution if the destination channel hangs up ?
* Maximum ring time: 20 seconds
Default: 20 seconds
Volume Gain (RX/TX): 0 0
Provide Music on Hold until answer:
Music On Hold: default (default)
Class of Service (Outgoing Calls): default
Enable Call Screening ?
Customize CallerID ?

Action 2 : Voicemail
* Voicemail: 1000: 1000
Select
Default: voicemail:1000/1000

Incoming Line Configuration

- If you have an Incoming Line set up to ring 1000 directly then you must ensure that the Use User-defined CallForward ?:[x] option is checked.
- Also make sure you select an Outgoing Class of Service for this line.



Auto Attendant Configuration

- If you have an Auto Attendant Key Assignment set up to ring 1000 directly then you must ensure that the Use User-defined CallForward ?:[x] option is checked.
- Also make sure you select an Outgoing Class of Service for this Key Assignment.

Logged as: admin

You must click on Commit button in order to apply Change.

Application Manager: Auto Attendants

Applications | **Auto Attendants** | Conferences | Custom Scripts | Scheduled Tasks

Auto Attendants

General | Options | **Keys Assignment** | Custom Keys

Press '1' for ...

Destination #1 : Extension(s) [v]
* Extension: 1000: 1000 (SIP) [v] [Select]

Use User-defined CallForward ? : ☒ [v]

Call Rotation Schedule: Disabled [v]

Volume Gain (RX/TX): 0 [v] 0 [v]

Class of Service (Outgoing Calls): default [v]

Customize CallerID ? : ☐ [v]

Destination #2 : None [v]

Authentication (PIN) ? : None [v]
Default: none

Prefix CallerID ? : ☐ [v]