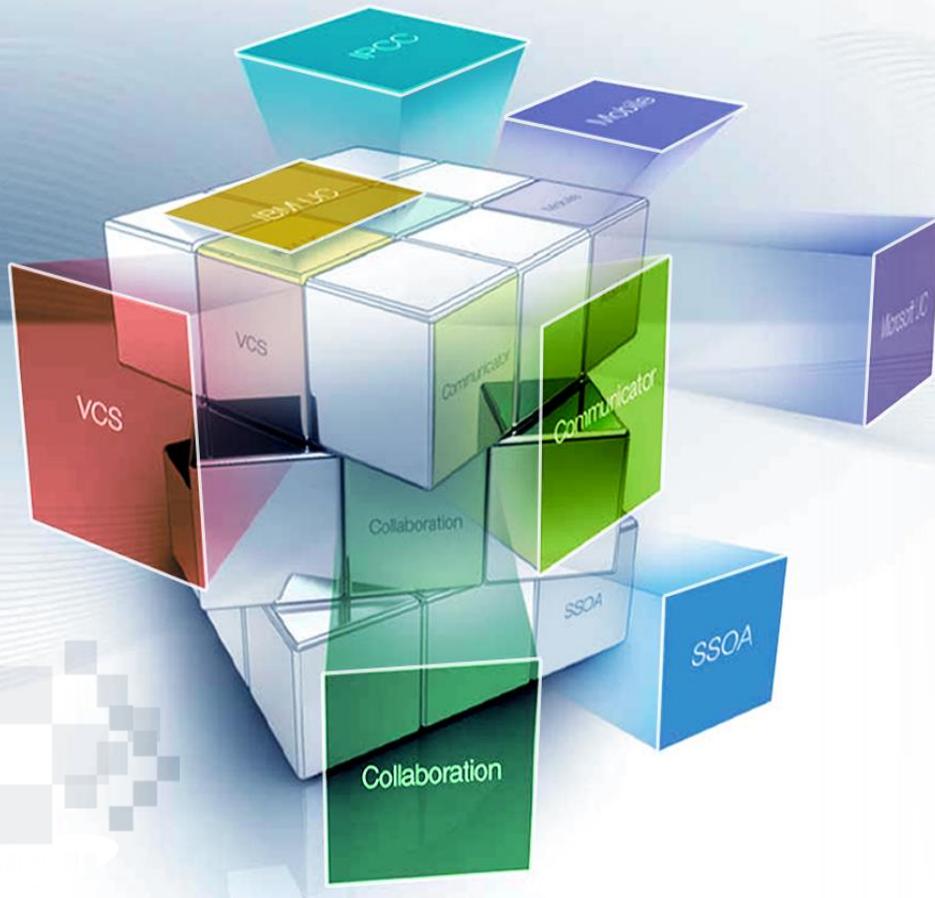


SCM Express V6.0.0 Configuration Guide



History

Version	Date	Changes
1.0	2016.05	Initial version for V6.0.0.x





Contents

- | Busy Override
- | User SBC
- | G500 system provisioning



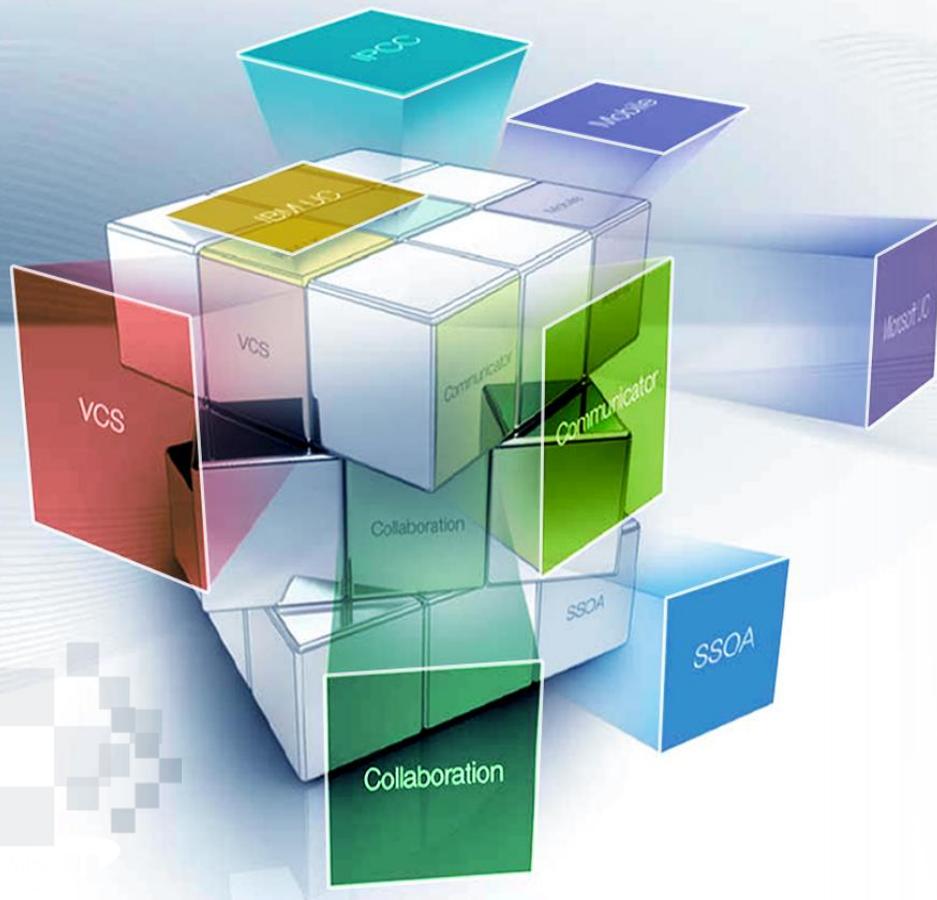
❖ V5.4.4.x Cautions

< Installation Cautions! >

- From V5.4.4.x release, OS (Operating System) is changed to CentOS 6. (Previous SCM versions supports CentOS 5)
- This version **MUST** be installed on S500-II or S700 server. (When installing on S500, main memory must be 8GB)



Busy Override



Conf 1) Busy Override

SCM will do their best to make a trunk call although all trunk lines are busy if the user dials the 'busy override' feature code and 'outgoing call number'.

The Busy Override should be set in the [CONFIGURATON > Service > Feature Service > Class of Service] menu.

The screenshot displays the SCM Administrator interface with the 'Class of Service - Change' dialog box open. The dialog box is titled '[DIALOG]Class of Service - Change' and contains various configuration options for a service class.

User Group: UG1

Name: high override

Override Level: Level 4

Privacy Level: Level 5

Call Limitation Level: Level 0

Second Class of Service: [Empty]

Restriction Policy: [Empty]

Hot Spot Restriction Policy: [Empty]

IP Zone A Restriction Policy: [Empty]

Call Transfer Restriction Policy: [Empty]

Smart Handover Type: None

Service Permission:

- AME
- Auto Record
- Barge-In without Tone
- Call Forward Busy
- Call Move Service
- Call Transfer
- Caller ID Display
- DND Override
- Dispatch Call
- Hot Line
- Internal Wi-Fi Push Service
- Move To Mobile
- Music on Hold
- No Use Transferee Restriction Policy
- Paging On Answer
- Preset Call Forward Busy
- Receiving Call in Hot Spot Zone
- Restricted Call Forward
- Absence
- Auto Retry
- Busy Override
- Call Forward No Answer
- Call Park Extension
- Call Waiting
- Change User Name
- Deny International Call Forward/Tran...
- Follow Me
- Hotel Inter-Room Call Lock
- Malicious Call Trace
- Move to WE VoIP First (Move Key)
- Multicast Paging
- One-Step Conference
- Pairing Service for Any Mobile
- Preset Call Forward DND
- Receiving Call in mVoIP Zone
- Ring Back Override
- Add-On Conference
- BLF Key Create
- Call Bridge
- Call Forward Unreachable
- Call Park Orbit
- Callback
- Conference Member Eject
- Different Group Call Forward
- Group Call Forward
- Hotspot Push Service
- Meet-me Conference
- Multi-Device Conference
- No Ring
- Operator Call
- Premium CID Service
- Preset Call Forward No Answer
- Remote Extension Set
- Second Class of Service
- Auto Answer
- Barge-In with Tone
- Call Forward All
- Call Logging
- Call Recording
- Caller ID Block
- DND
- Direct Trunk Selection
- Hot Desking
- Individual Speed Dial Insert/Delete
- Mobile Auto Answer
- Multi-ring
- No Ring Override
- Outbound Call Lock
- Preset Call Forward All
- Preset Call Forward Unreachable
- Remote Office
- Service After Speed Dialing

The 'Busy Override' checkbox is highlighted with a red box. The dialog box has 'Change', 'Apply', and 'Close' buttons at the bottom.

System Viewer:

System: [MINE] os6-scm-15

Status: [MASTER] Active Alone

Alarm: CRI (0) MAJ (1) MIN (0)

CPU Memory File

Message

2016-05-25 14:30:44

Conf 2) Busy Override

The Busy Override feature code should be configured in the **[CONFIGURATION > Service > Feature Service > Feature Code]** menu.

The screenshot displays the SCM Administrator web interface. The main navigation bar includes 'PERFORMANCE', 'CONFIGURATION', 'MANAGEMENT', 'VM/AA', and 'CONFERENCE'. The 'CONFIGURATION' menu is expanded, showing 'Feature Code' selected. The 'Feature Code' configuration page is shown for 'User Group: UG1'. A table lists various feature codes, with 'Busy Override' highlighted in yellow and a red box around it. The table has columns for 'Service Type', 'Feature Code Digit', 'Minimum Digit Length', and 'Maximum Digit Length'. Below the table, there are buttons for 'Detail', 'Change', 'Excel', 'Detach', 'Help', and 'Close'. At the bottom, there is a 'System Viewer' section showing system status and an 'Event Viewer' table with columns for 'Level', 'Type', 'Date/Time', 'Node Name', 'System Name', and 'Description'.

Service Type	Feature Code Digit	Minimum Digit Length	Maximum Digit Length
Auto Retry - Cancel	+170	1	30
Auto Retry - Set	+171	1	30
Barge-In with Tone	+23	1	30
Barge-In without Tone	+24	1	30
Busy Override	+83	1	30
Call Bridge			
Call Forward All - Cancel	+610	1	30
Call Forward All - Set	+611	1	30
Call Forward Busy - Cancel	+620	1	30
Call Forward Busy - Set	+621	1	30
Call Forward Busy/NoAnswer - Cancel	+640	1	30
Call Forward Busy/NoAnswer - Set	+641	1	30
Call Forward Clear All	+60	1	30
Call Forward No Answer - Cancel	+630	1	30
Call Forward No Answer - Set	+631	1	30
Call Forward No Answer - Time Set			

Level	Type	Date/Time	Node Name	System Name	Description
Major	ALARM	2016-04-18 17:29:43	NODE 1	os6-scm-16	SUBSCRIBER [MAX=200][CURRENT=198][99]
Major	ALARM	2016-04-18 17:02:28	NODE 0	os6-scm-15	SUBSCRIBER [MAX=200][CURRENT=198][99]

Conf 3) Busy Override

SCM will release the ongoing call made though the busy trunk if the opposite site of the busy call has the lower privacy level than busy override caller's override level. The Override/Privacy Level can be set in the [CONFIGURATON > Service > Feature Service > Class of Service] menu.

The screenshot displays the 'Class of Service - Change' dialog box within the SCM Administrator application. The dialog is titled '[DIALOG]Class of Service - Change'. It features several sections:

- User Group:** UG1
- Override Level:** Level 4 (highlighted with a red box)
- Call Limitation Level:** Level 0
- Name:** high override
- Privacy Level:** Level 5 (highlighted with a red box)
- Second Class of Service:** Second Class of Service
- Restriction Policy:** Restriction Policy
- Hot Spot Restriction Policy:** Hot Spot Restriction Policy
- IP Zone A Restriction Policy:** IP Zone A Restriction Policy
- Call Transfer Restriction Policy:** Call Transfer Restriction Policy
- Smart Handover Type:** None

Below these fields is the 'Service Permission' section, which contains a grid of checkboxes for various services. Many of these are checked, including:

- AME
- Auto Record
- Barge-In without Tone
- Call Forward Busy
- Call Move Service
- Call Transfer
- Caller ID Display
- DND Override
- Dispatch Call
- Hot Line
- Internal Wi-Fi Push Service
- Move To Mobile
- Music on Hold
- No Use Transferee Restriction Policy
- Paging On Answer
- Preset Call Forward Busy
- Receiving Call in Hot Spot Zone
- Absence
- Auto Retry
- Busy Override
- Call Forward No Answer
- Call Park Extension
- Call Waiting
- Change User Name
- Deny International Call Forward/Tran...
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- Malicious Call Trace
- Move to WE VoIP First (Move Key)
- Multicast Paging
- One-Step Conference
- Pairing Service for Any Mobile
- Preset Call Forward DND
- Receiving Call in mVoIP Zone
- Ring Back Override
- Add-On Conference
- BLF Key Create
- Call Bridge
- Call Forward Unreachable
- Call Park Orbit
- Callback
- Conference Member Eject
- Different Group Call Forward
- Group Call Forward
- Hotspot Push Service
- Meet-me Conference
- Multi-Device Conference
- No Ring
- Operator Call
- Premium CID Service
- Preset Call Forward No Answer
- Remote Extension Set
- Second Class of Service
- Auto Answer
- Barge-In with Tone
- Call Forward All
- Call Logging
- Call Recording
- Caller ID Block
- DND
- Direct Trunk Selection
- Hot Desking
- Individual Speed Dial Insert/Delete
- Mobile Auto Answer
- Multi-ring
- No Ring Override
- Outbound Call Lock
- Preset Call Forward All
- Preset Call Forward Unreachable
- Remote Office
- Service After Speed Dialing

At the bottom of the dialog are three buttons: 'Change', 'Apply', and 'Close'. The background shows the SCM Administrator interface with a sidebar menu and system information.

Conf 4) Busy Override

The Class of Service can be configured in the [CONFIGURATION > Trunk Routing > Route > Trunk Service Tab] menu. To release the busy line, the priority order should be checked using override/privacy level in the Class of Service.

The screenshot displays the SCM Administrator interface. The main window is titled "[DIALOG] Route - Change" and has several tabs: Basic Configuration, SIP Registration, Additional SIP, Trunk Service, Interworking, and Number Translation. The "Trunk Service" tab is active. The "Class of Service" dropdown menu is highlighted with a red box, and "high override" is selected. Other settings include "Trunk Access Code", "Available Route", "Trunk Restriction Policy", "Anonymous Call Reject", "Maximum Call", "Maximum Outbound Call", "Outbound Error Announcement", "Call Forward Announcement Iteration", "Use Virtual Ringback", "Virtual Ringback for Outbound Call", "Default Access Code for Tendon", "Route Lock", "Call Forward Block", "Maximum Inbound Call", "Allow Reroute ReasonCode", "Inbound Error Announcement", "Caller Ring Type", "Use Real Ringback", and "Auto Answer Ignore".

At the bottom of the interface, there is a "System Viewer" section showing system status and a table of alarms.

System: [MINE] os6-scm-15
 Status: [MASTER] Active Alone
 Alarm: CRI (0) MAJ (1) MIN (0)

Severity	Type	Time	Node	Device	Description
Major	ALARM	2016-04-18 17:29:43	NODE 1	os6-scm-16	SUBSCRIBER [MAX=200][CURRENT=198][99]
Major	ALARM	2016-04-18 17:02:28	NODE 0	os6-scm-15	SUBSCRIBER [MAX=200][CURRENT=198][99]

At the bottom, there is a "Message" bar showing "Completed (Total : 5 / 5) [2016-05-25 15:04:07]" and a timestamp "2016-05-25 15:04:44".

Conf 5) Busy Override

If the maximum call is 2 and there are 2 calls, SCM will find the longest continuous call that satisfying with the priority order condition amount 2 calls. The call will released forcedly.

If the maximum call is not set, SCM will check these conditions after receiving 486 Busy response and then make a busy override call again.

SCM Administrator

[DIALOG] Route - Change

Basic Configuration | SIP Registration | Additional SIP | Trunk Service | Interworking | Number Translation

Trunk Access Code: [Dropdown]
 Available Route: Enable
 Trunk Restriction Policy: [Dropdown]
 Anonymous Call Reject: None
Maximum Call: [Text Field]
 Maximum Outbound Call: [Text Field]
 Outbound Error Announcement: Disable
 Call Forward Announcement Iteration: 0
 Use Virtual Ringback: Disable
 Virtual Ringback for Outbound Call: Disable

Default Access Code for Tendum: [Dropdown]
 Route Lock: [Dropdown]
 Call Forward Block: Disable
 Class of Service: high override
 Maximum Inbound Call: [Text Field]
 Allow Reroute ReasonCode: [Text Field]
 Inbound Error Announcement: Disable
 Caller Ring Type: None
 Use Real Ringback: Disable
 Auto Answer Ignore: Enable

Change Apply Close

System Viewer

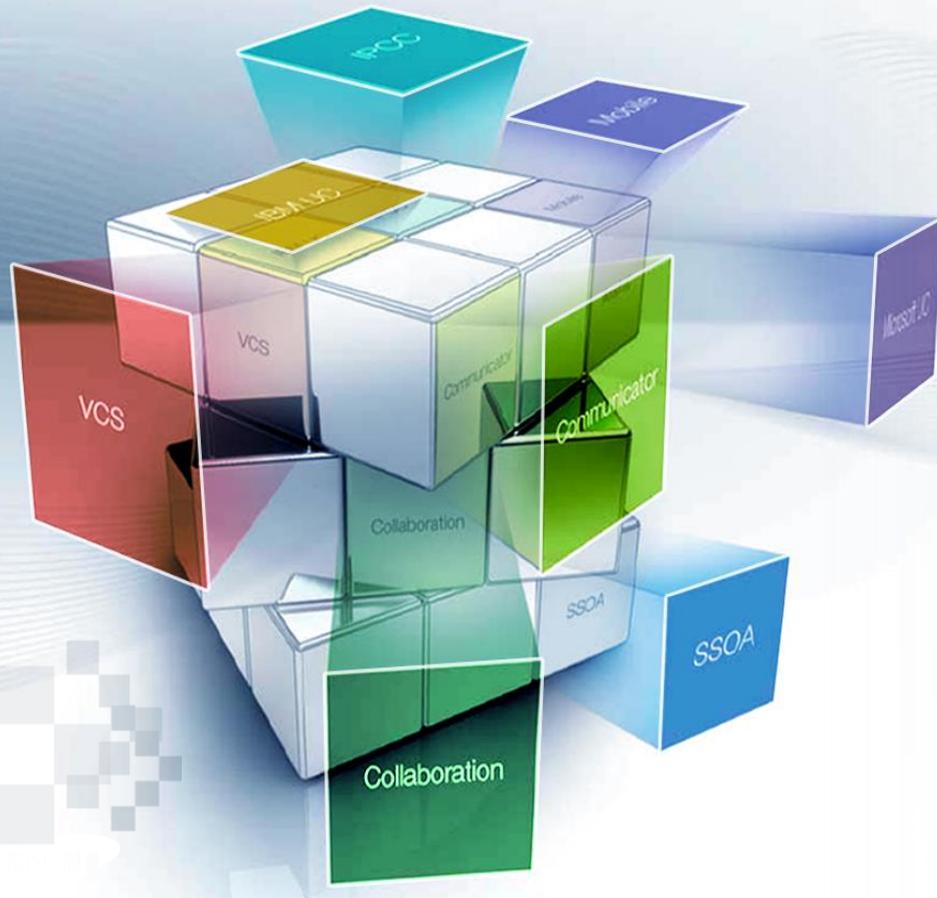
System: [MINE] os6-scm-15
 Status: [MASTER] Active Alone
 Alarm: CRI (0) MAJ (1) MIN (0)

Level	Type	Date/Time	Node Name	System Name	Description
Major	ALARM	2016-04-18 17:29:43	NODE 1	os6-scm-16	SUBSCRIBER [MAX=200][CURRENT=198][99]
Major	ALARM	2016-04-18 17:02:28	NODE 0	os6-scm-15	SUBSCRIBER [MAX=200][CURRENT=198][99]

CPU Memory File

Message Completed (Total : 5 / 5) [2016-05-25 15:04:07] 2016-05-25 15:04:44

User SBC



User SBC (1/2)

- **Multiple SBCs for user registration are supported. SBC information such as IP address and port is used to make profile of a user.**
 - ▶ Create 'User SBC' in the [CONFIGURATION > User > User SBC].
 - ▶ User SBCs can be created up to 35 for each Node and maximum 2500 users can be assigned to one User SBC.
 - ▶ Several User SBCs with same IP and port are supported.

The screenshot shows the SCM Administrator interface. The left navigation pane has 'User SBC' highlighted. The main content area shows the 'User SBC' configuration page with a table of existing entries and a 'User SBC - Detail' dialog box.

User Group	Name	Node Name	IP Address	UDP Port	TCP Port
UG1	Seoul_SBC	NODE 0	1.1.1.1	5060	5061
UG1					

User Group	Name	Node Name	IP Address	UDP Port	TLS Port
UG1	Suwon_SBC	NODE 1	2.2.2.2	5060	5061

The 'User SBC - Detail' dialog box also shows a 'Phone Name' list with values from 3000 to 3012.

User SBC (2/2)

- Assigned 'User SBC' can be changed in the [CONFIGURATION > User > Single User/Multi-Extension Phone].

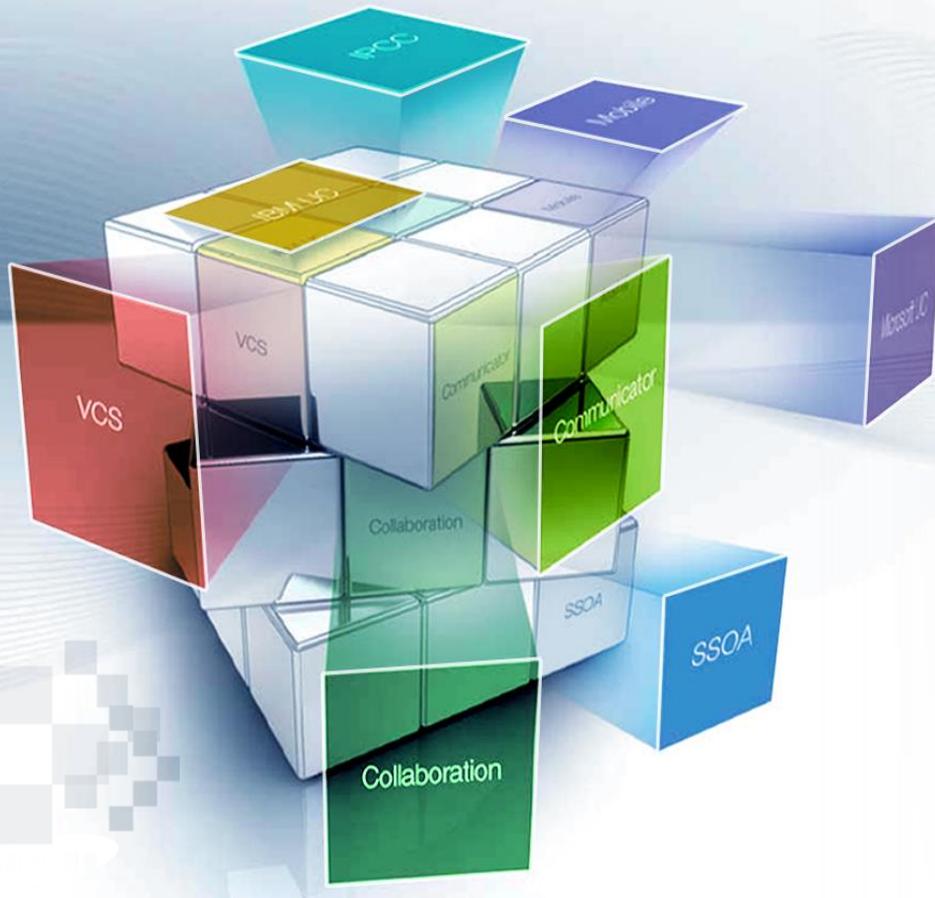
[DIALOG] Single Phone User - Detail

Basic Configuration Protocol Number Translation Service Interworking Phone

Protocol	UDP	Check Registration Protocol	Disable
Media	RTP	URI Type	SIP
TLS Connection	Reuse	TLS Key Decryption Password Type	Direct
TLS Key Decryption Direct Password		TLS Key Decryption Device ID	
TLS Key Decryption Salt		TLS Key Decryption IC	512
TLS Key Decryption DK	20	MOH SIP Media Mode	Send Only
DTMF	RFC2833	RFC2833 DTMF Payload	101
SIP-PRACK option	Disable	Send RTCP on Hold	No
Use InterProxy	Disable	PROXYB Index	2
User SBC for Node 0	Seoul_SBC	User SBC for Node 1	Suwon_SBC

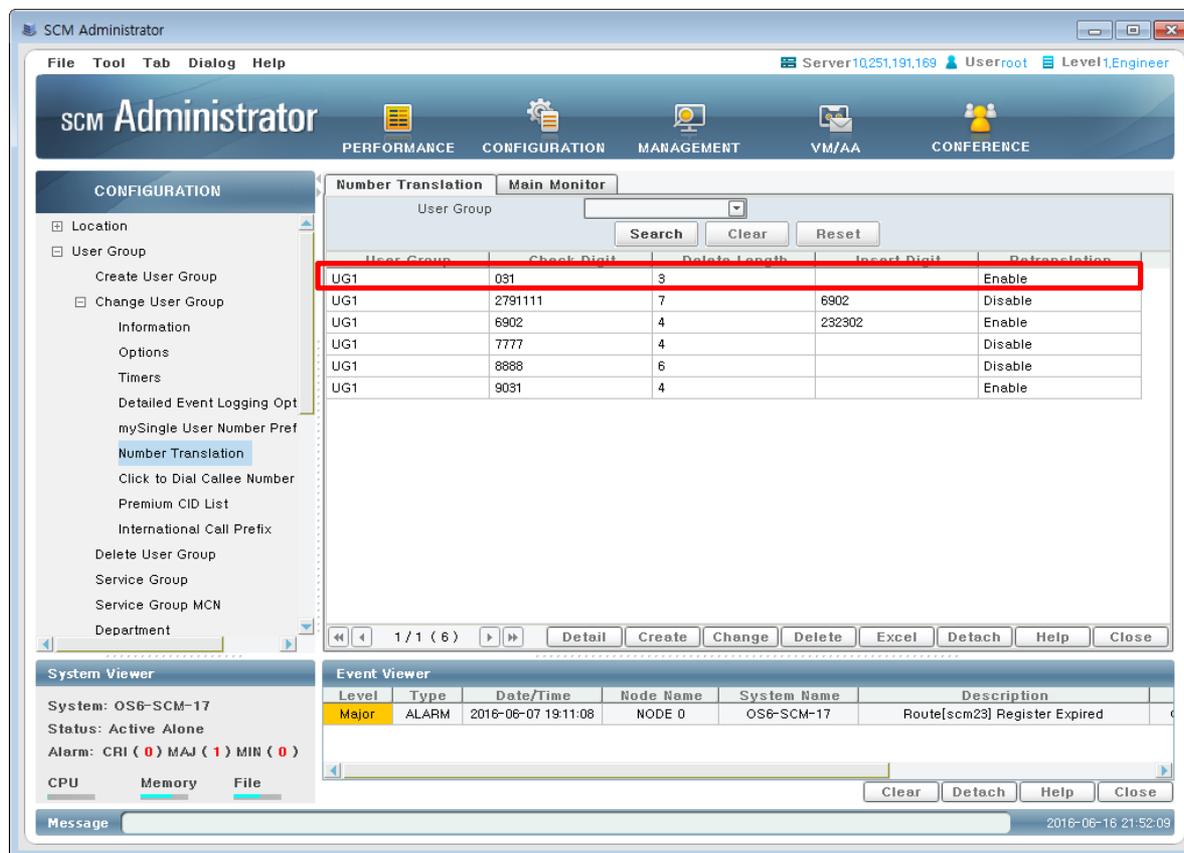
Close

Enhanced Number Translation Feature



Enhanced Number Translation Feature

- **User Group's Number Translation Feature is enhanced.**
 - ⌚ [CONFIGURATION > User Group > Change User Group > Number Translation].
 - ⌚ Re-translation feature is supported.
 - ⌚ If subscriber dial a 031+2791111, SCM provides a service as 6902.

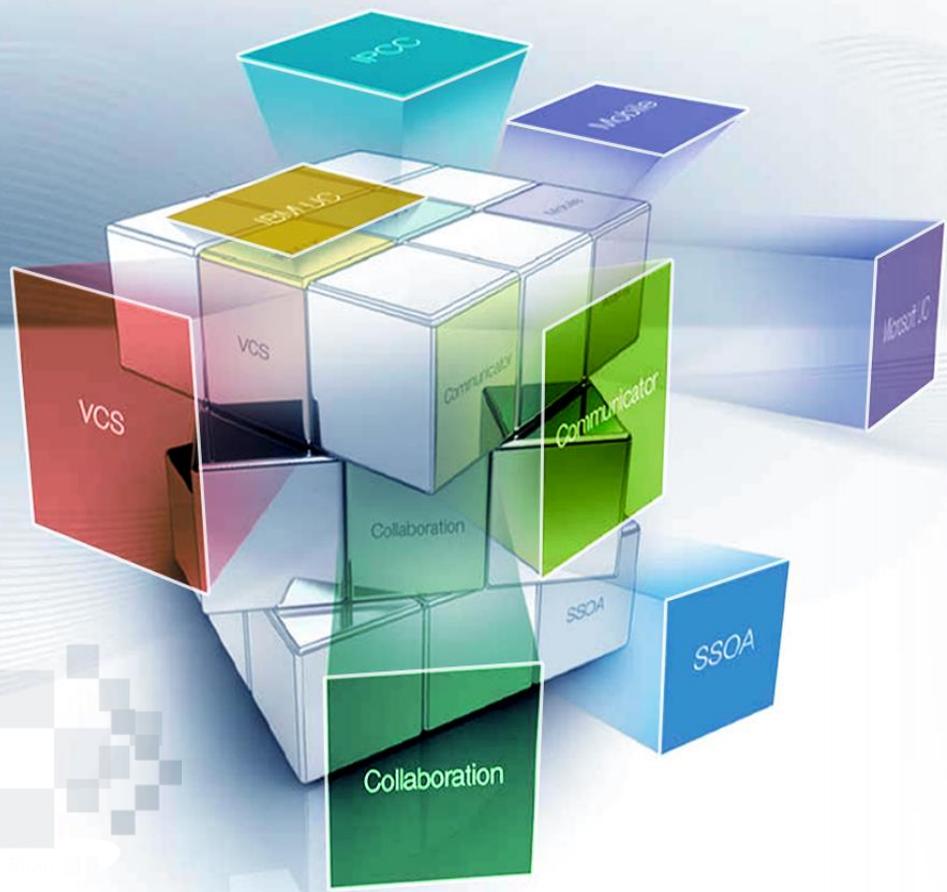


The screenshot shows the SCM Administrator web interface. The main content area displays the 'Number Translation' configuration page for a specific User Group. The table below is highlighted in red:

User Group	Check Digit	Delete Length	Insert Digit	Retranslation
UG1	031	3		Enable
UG1	2791111	7	6902	Disable
UG1	6902	4	232302	Enable
UG1	7777	4		Disable
UG1	8888	6		Disable
UG1	9031	4		Enable

The interface also shows a left-hand navigation menu with 'Number Translation' selected, and a bottom status bar indicating the system is active and showing an alarm for a route register expiration.

G500 system - SNMP configuration provisioning



G500 system – SNMP configuration provisioning

- SNMP configuration is provided to G500 System
- Refer to [CONFIGURATION > Miscellaneous > SNMP Config]

The screenshot displays the SCM Administrator web interface. The main content area is titled "SNMP 구성" (SNMP Configuration) and "메인 모니터" (Main Monitor). It features a table for configuring SNMP communities and servers. The table has columns for "읽기 커뮤니티" (Read Community), "쓰기 커뮤니티" (Write Community), "트랩 커뮤니티" (Trap Community), and three "R/W 서버" (Read/Write Servers) columns, followed by a "트랩 서버" (Trap Server) column. A "찾기" (Search) button is located above the table. Below the table, there are navigation buttons: "자세히" (Details), "변경" (Change), "엑셀" (Excel), "창분리" (Split Window), "도움말" (Help), and "닫기" (Close).

On the left side, there is a "환경 설정" (Environment Settings) menu with a tree view. The "SNMP 구성" (SNMP Configuration) option is selected. Below the menu is the "System Viewer" section, which shows system information: "시스템: OS6-SCM-08", "상태: Active Alone", "알람: CRI (0) MAJ (0) MIN (0)", and tabs for "CPU", "메모리" (Memory), and "파일".

At the bottom, there is an "Event Viewer" section with a table for monitoring events. The table has columns for "레벨" (Level), "타임" (Time), "날짜/시간" (Date/Time), "노드 이름" (Node Name), "시스템 이름" (System Name), "설명" (Description), "분류" (Category), "이미지" (Image), and "인" (In). Below the table are buttons for "지우기" (Clear), "창분리" (Split Window), "도움말" (Help), and "닫기" (Close).

The status bar at the bottom shows a "Message" box with the text "[변경] 완료" (Change Complete) and the timestamp "[2016-10-13 10:20:20]". The current date and time are also displayed as "2016-10-13 10:20:22".



Thank you