ST20xx SIP
New Features
SG vx.74
Release Notes

Contents

1 Overview

This document describes a set of new features included in TB30 SIP v1.73 in order to improve their usability in different environments.

2 SIP unregister does not behave in the correct manner (4073)

With the SIP Unregister check-box selected a de-Register is sent with an Expiry Timer of 0 Seconds which is correct but with a Contact of * (star) rather than the correct contact of the phone

We would also expect the device to de-register during the following scenarios with its own contact rather than Contact with "*"

01) Soft Reboot
02) Change in credentials (Need to de-register old credentials and register with new credentials)
03) Change in voice profile (Need to de-register de-selected profile and register the newly selected profile)

"It's like that since the beginning. It follows the rfc 3261:

10.2.2 Removing Bindings
Registrations are soft state and expire unless refreshed, but can also be explicitly removed. A client can attempt to influence the expiration interval selected by the registrar as described in Section

10.2.1. A UA requests the immediate removal of a binding by specifying an expiration interval of ""0"" for that contact address in a REGISTER request. UAs SHOULD support this mechanism so that bindings can be removed before their expiration interval has passed.

The REGISTER-specific Contact header field value of ""*"" applies to all registrations, but it MUST NOT be used unless the Expires header field is present with a value of ""0"".

Use of the ""*"" Contact header field value allows a registering UA to remove all bindings associated with an address-of-record without knowing their precise values."

The customer has an option for REBOOT in GUI and hence we would like to see this addressed in TB30.

The contact header of Unregister message should be the correct contact of the phone not "*".

- If change profile, phone unregister with the old account.
- If change account, phone unregister with the old account.
- If system reboot from web GUI or from the Menu Options, phone unregister before reboot.
- IP of phone is change, phone unregister before reboot.

3 Never Hangup (4319)

One of our customers requests the following features:

1. Only the administrator of the phones has the right to activate or dis-activate the function
2. When Activated, the function :
    1. does not allow any Call Center operator to hang up and finish the call with the calling party (as a consequence, the Call Center Operator is obliged to stay on line with the calling party until the time that the calling party has hanged up to terminate the call).
    2. has to work on the various possible ways that are normally used by Call Center operators to hang-up and terminate the call (from the head set, from the handset or from the key pad)
    3. If there is an incoming call, **the user should NOT have the possibility to <u>REJECT</u>** a call. The REJECT functionality should be disabled for users.

The user should be able only to answer to the phone and transfer the call to a specific Supervisor.

A new parameter is added for never hangup for incoming call. This parameter is configurable in common config file and telnet.

NeverHangup = 0/1 (0: Off Default)
// 0: off (Original)
// 1: on (Never Hangup On)

Telnet CLI:
lcdui set NeverHangup 0/1

Remark:

- It is only for incoming call.
- The only way to end the call is by the calling party.
- When it is handset mode, onhook will go to handsfree mode.
- When it is headset mode, press the headset button will have no response.
- When it is handsfree mode, press the handsfree button will have no response.
- EndCal soft key: no response if it is a incoming call
- Function key: no response to press function key to end the call.
- The Telnet control should be the same response as key press.
- The way to hangup is by the SIP BYE message.
- When NeverHangup is on, the REJECT functionality should be disabled.

4 Event Header(5067)

One of our customer request to a change for the Subscription and Notifications.

It needs to be disabled as it causes inter-op issues with customer requirement

A new parameter is added for this. This parameter is configurable in common config file and telnet.

B_suppress_evt = 0/1 (0: default)

// 0: current behavior

// 1: Event header value different shall answer based on the following table

Event Header Value	V1.73	V1.73.1	B_suppress_evt = 0	B_suppress_evt = 1
dialog	200	200	200	200
message-summary	200	404	404	404
gateway-upgrade	200	200	200	200
check-sync	200	200	200	200
talk	200	200	200	200
hold	200	200	200	200
conference	200	200	200	200
Reg	200	200	200	200
call-info	200	200	200	200
line-seize	200	200	200	200
missed-call-summary	200	200	200	200
presence	200	200	200	489
ua-profile	200	200	200	200
Winfo	400	489	489	489

All other event which not known by phone will response 489.

5 Conference Not Allow NW (4862)

One of our customer request to implement Conference Not Allowed NW

Prerequisites:

Tested CPE is RFC-4579 compliant.

Through GUI create a line with line template having Call Conference feature deactivated.

Configuration:

On SAU, in cpe specific ini file set the parameter [sip].holdTrfRight=1

1. A (Tested CPE) calls B. B answers the Call.
2. Press Hold Button on phone A to put B on hold.
3. Dial C from A
4. Pick up C.
5. On phone A press the Conference Button.

Expected result:

1. Check that A and B are connected and hear each other.
2. Check that A hears dial tone and B is on hold (hears hold music).
3. Phone C must ring and A hears ring back tone.
4. A and C are in active call. B is still on hold.

5a. Check that the REFER request sent by CPE A, is rejected with a 403 (Forbidden) response by the network.

5b. Ensure that as the REFER transaction fails (the final response is not 2xx), the CPE A returned back to the previous state (A is in active call with C, B is still on hold).

The right behavior is:

- The INVITE request could be rejected with a 403 (Forbidden) response by the network if the user is not allowed to perform Call Conferencing. In all cases when the INVITE transaction fails (the final response is not 2xx), the CPE MUST return back to the previous state.
- The REFER request could be rejected with a 603 (Decline) response by the network if the user reaches the maximum number of participants in a conference. In all cases when the REFER transaction fails (the final response is not 2xx), the CPE MUST return back to the previous state.

6 Group Pickup Key (4794)

One of our customer request to add a function Group Pickup Key
They want to have a soft-key like for direct pickup and have a way to configure the service code (*8#) like for direct pickup.
A new service code is added for auto pickup
AutoPkupNum =
(the length is max to 6)
A new parameter is added for pickup. This parameter is configurable in common config file and telnet.
Local_Pickup_type: 0/1/2
// 0: Manual pickup (default) it is current pick up. User need to enter the number they want to pick up.
// 1: Auto pickup: config before calling. And no need to enter the number when pick up the call.
// 2: both pick up exist
If **Local_Pickup_type=2**, then pressing pick up soft key, it will enter another page and there`ll be 2 choises:
If AutoPkupNum is empty means original pick up function.

1. M_pick =>original pick up function
2. A_pick =>auto pick up function

User can choose the one they like to do pick up feature.
In WEB GUI. We will have 3 choise :
0: Manual pickup; no configuration for AutoPkupNum
1: auto pickup with configuration for AutoPkupNum
2: both pick up exist with configuration for AutoPkupNum
Another new parameter is added for pickup. This parameter is configurable in common config file and telnet.
Auto_pickup_Method=0: SUBSCRIBE will be used
//0: SUBSCRIBE will be used.
//1: the number will be sendout with INVITE method

7 VPN Escape Code For Per Line For SF and HG(4907)

One of our customer need to have the possibility to configure the service code per line basis for at least Secretarial Filtering and Hunting Group.

The reason to have a per line service code configuration is the following:

On our PF we can configure a VPN escape code “y” for a line “xxx”. In this case the subscription must be done with VPN escape code “yxxx” but the activation/deactivation of SF or HG, so service code, must be done without VPN escape code “xxx”.

For example with Secretarial Filtering supervision, if the manager has a VPN escape code “9” and line number “222”, on assistant the subscription must be done with “9222” and service codes must be *270222* for activation and *271222* for deactivation.

They want to Propose :

1. To keep the global service code configuration
2. According to service supervision selected, add the possibility to configure the service code per line key and this service code will surcharge the global service code configuration

A new parameter is added for Escape code.

This parameter is configurable in common config file and telnet.

VPNEscCode = 0/1 (0: default)

// 0: Disable

// 1: Enable VPN Escape Code

In Config files, the following items are added for Escape code.

VPNesp1=x

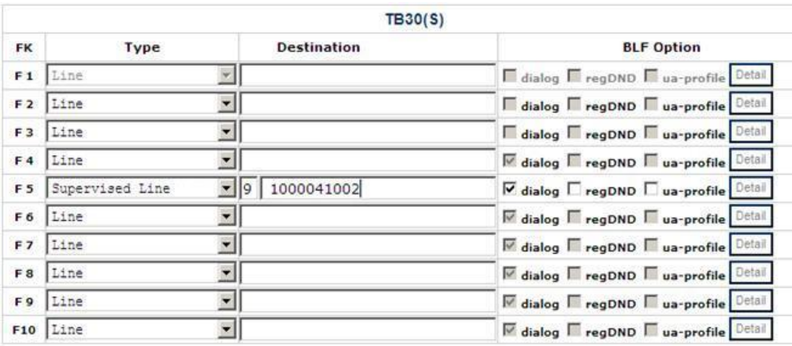
VPNesp2=x

...

VPNesp66=x

The length of the Escape Code is 1.

A Text Box is added in the Supervised Line for input for the escape code when VPNEscCode = 1.



TB30(S)

FK	Type	Destination	BLF Option
F 1	Line		dialog regDND ua-profile Detail
F 2	Line		dialog regDND ua-profile Detail
F 3	Line		dialog regDND ua-profile Detail
F 4	Line		dialog regDND ua-profile Detail
F 5	Supervised Line	9 1000041002	dialog regDND ua-profile Detail
F 6	Line		dialog regDND ua-profile Detail
F 7	Line		dialog regDND ua-profile Detail
F 8	Line		dialog regDND ua-profile Detail
F 9	Line		dialog regDND ua-profile Detail
F10	Line		dialog regDND ua-profile Detail

8 Call Join (4458)

One of our customer need to have one function Call Join .

A new parameter is added for call join. This parameter is configurable in common config file and telnet.

CallJoin = 0/1 (0: Default)

// **0:** (without call join – Original)

A create a conference with B and C, when A hang up, it will send BYE to B, C, then A, B, C return to idle.

// **1:** (with call join)

A create a conference with B and C, when A hang up, A transfer B to C, then after A return to idle, B and C still keep talking.

9 DNS Query (4803)

One of our customer requests the following feature

They uses some high availability system . It consists of one Call Server (CS) and one Passive Call Server (PCS). The PCS takes the control if the CS is down. To do this, they configure the DNS so when somebody asks for the CS IP address, the DNS server responds with 2 IP addresses: one of the CS and one of the PCS.

With both TB30 and ST2030, the scenario is falling and the phones get blocked sending REGISTER to the PCS although it is responding with 503.

The test result is as follows:

When the phone is started, it does a DNS query and it stores both IP addresses. It is registered to the CS. Then the CS is stopped so the PCS starts working. While it starts there is no service available at all. Then the phones sends the REGISTERs and get registered to the PCS when this is ready. Then they do an out-coming call. The phone sends several INVITE to the CS (it shouldn't as it is now registered to the PCS), but as this is KO, it finally sends it to to the PCS and the call is OK.

Then they have an incoming call, and it is OK as it is registered correctly.

Then, the CS is up again but the phone insists on going to the PCS (it answers with a 503, because PCS is now down) but it doesn't get registered to the CS so the phone gets out of service and it is needed a manual reboot

Requirement:

When the server has no response or get 503, phone will move to the second one.

10 SIP Scenario of Alternate Call with Notify Event (4311)

One of our customers requires the following feature:

SIP Scenario of Alternate Call with Notify Event=talk

A new parameter is added for alternative call. This parameter is configurable in common config file and telnet.

TIAlternativeCall = 0/1 (0: Off Default)

// 0: off (Original)

// 1: on (TI Alternative Call handling)

Remark for TIAlternativeCall = 1:

- Do not send the INVITE with sendonly. If it has been already put in inactive means phone already hold that line.
- INVITE with sendonly only in the event in which an INVITE with inactive does not have precedence received on that same one leg.
- Attached here is trace for reference.

11 Carries All Codec When Transfer is processed by server 4957

One of our customers want to improve the following problem:
When unhold a call, it provides an offer with all codec it supports not only the one codec with which phone negotiated successfully before.

Requirement:

A new parameter is added for unhold problem. This parameter is configurable in common config file and telnet.

UnholdCodec = 0/1 (0: negotiated codec only)

// 0: one codec (Original - negotiated codec only)

// 1: all codec (all support codec)

12 DHCP Hostname (4819)

One of our customer has some other IP phones and they use this system to assign the IPs via DHCP (hostname IP).

Requestment:

Implementation DHCP hostname.

End of document