

Test Report				
Project / KA:		Certification Nokia E75 Dualmode Mobile (WLAN/SIP) with HiPath 3000 V8		
ITEM Test plan:		ITEM2: HiPath 3000 V8 R4		
ITEM Test session:		ITEM2: Cert_SIP_Nokia_E75_HE684B.00.013_HI-G15.84.002		
Test TPL:		SEN VA SME QA1		
Tester:		SEN VA SME QA1		
TEST		TEST DEMAND:		
<input type="checkbox"/>	Integration Simulation	Certification starting with: HiPath 300 V8 R4		
<input type="checkbox"/>	Integration Hardware			
<input type="checkbox"/>	Regression Test			
<input checked="" type="checkbox"/>	Certification Test			
<input type="checkbox"/>	System Test			
Result overview, test cases:		all	passed	failed
		84	74	10
Overview:				
<input type="checkbox"/>	Retest necessary			
<input type="checkbox"/>	Object not released			
<input checked="" type="checkbox"/>	Object released			
<input type="checkbox"/>	Test coverage: 100 %			
Blocking Points: None				
Date / Signature (Tester) 29.04.2010			Date / Signature (Test TPL)	

History of change:

Date	Author	Version	Review No.	Comment
06.04.2010		001		Creation test report
29.04.2010		002		Added failed test case for unattended transfer

Test Environment, Preconditions:

This certification test investigates interworking between HiPath 3000 V8, HG1500 and Nokia E75 Dualmode mobile phone. The WLAN SIP client is in focus here. SIP station is configured in Mobility Entry list in Hipath 3000. SIP station is member of a Basic MULAP with HFA or TDM. Configuration and multiple payload scenarios are checked.

Environment:

1. HiPath 3500 V8: HE684S.00.013
2. HiPath HG1500: HI-G15.84.002
3. OpenStage 20...80 HFA: V2 R0.35.0
4. optiPoint 4x0 HFA: V5 R6.1.0
5. optiPoint 420 SIP: V7 R5.6.0
6. optiPoint 150 S:
7. Nokia E75-1: S60, VoIP Rel 3.1, Firmware 202.12.01 (show firmware version on phone with "*#0000#")
8. Nokia SIP VoIP Settings: SIP_VoIP_3_x_Settings_v2_0_en.sis
9. Nokia E75 Default Codecs: 1=AMR-WB, 2=AMR, 3=G.711u, 4=G.711a, 5=iLBC, 6=G.729, 7=CN
10. HG1500 Default Codecs: 1=G711a, 2=G.711u, 3=G.723, G.729, G.729AB
11. WLAN WB500/AP2630: V1R3.10504.4

Nokia E75 SIP client configuration:

1. Install SIP VoIP 3.x Settings application (SIP_VoIP_3_x_Settings_v2_0_en.sis) on your mobile device using Nokia PC Suite.
2. *Menu-> Ctrl. Panel-> Net settings-> Advanced VoIP settings-> Create new service:*
3. Select *Create new SIP profile* option:
4. Configure *Username* "<SIP call number>@<HG1500 IP address>"
5. Configure *Password* "<password>" if authentication is configured in HiPath (HiPath 3000 workpoint client data: UserID = <SIP call number> and Realm = <HG1500 IP address>)
6. Answer following question "*Would you like to create presence settings for the service?*" with "No"
7. Select following option for "*Activate service*"
8. Now the WLAN configuration is started, if not yet done:
9. Select your WLAN network (SSID is should be displayed) and enter Preshared key (PSK)

Nokia phone does not allow editing of SIP profile settings as long as VoIP Service is active. If editing is necessary, then switch phone temporarily to Offline mode and do not allow WLAN access in Offline mode: *Menu-> Ctrl. Panel-> Profiles-> Offline* (or: *push red on hook button* and select *Offline*).

The VoIP service is activated again after switching to profile *General* and next *internet call* attempt.

It is recommended to **disable "Comfort Noise" (CN)** in SIP profile, to get better voice quality. Nokia phone shows this setting as "CN codec", that is relevant for G.711 and iLBC codec if it exists in VoIP settings.

1. Switch phone to Offline mode

2. *Menu-> Ctrl. Panel-> Net settings-> Advanced VoIP settings->VoIP services-> Select your Service-> Codecs:*
3. Select the "CN" codec and delete it
4. switch phone back profile *General*.

Configuration for Voicemail Notification:

Nokia E75 can notify user about new voice messages in HiPath Voicemail system (IVM but not EVM). There is always a new message in inbox, when number of new messages is changing. Voicemail must be configured in Nokia E75, to get the notification and callback to voicemail option:

1. Switch phone to Offline mode
2. *Menu-> Ctrl. Panel-> Net settings-> Advanced VoIP settings->VoIP services-> Select your Service-> Profile settings:*
3. Select your SIP profile in *Voicemailbox Settings ID*
4. Configure *Voicemailbox address " <Voicemail call number>@<HG1500 IP address>"*
5. switch phone back profile *General*.

ITEM Result:



Cert_SIP_Nokia_E75
_HE684B.00.013_HI-

MRTS Overview:

#	MR ID	Pri	Summary
001	H74052	4	Cert: Nokia E75: call from HFA put on hold before release
002	H74070	3	Cert: Nokia E75: call released when SIP is put on hold by HFA
003	H74074	2	Cert: Nokia E75: TDM cannot be put on hold a second time
004	H74114	3	Cert: Nokia E75: sporadically no transfer with Nokia SIP pos
005	No MR	3	Cert: Nokia E75: is not doing semi attended transfer (no REFER, CANCEL after on hook)

Conclusion and Restrictions:

The Nokia E75 SIP Client can be used as WLAN VoIP client in HiPath 3000 V8 environment. Following hints or restrictions have been found:

- . Nokia phone configuration is done via additional VoIP setting tool (SIP_VoIP_3_x_Settings_v2_0_en.sis)
- . "Comfort Noise" feature should be disabled on Nokia E75 phone; otherwise the voice may appear shortly interrupted; disruptive clicking and noise will be heard on some ITSP calls (e.g. toplink)
- . Voice in direction to Nokia Phone is distinctly delayed. Reducing Jitter buffer in Nokia phone (default = 200 ms) seems not to take effect.
- . some call transfer scenarios may fail (as described in failed test cases)
- . Nokia E75 does not Re-Register, when LAN connectivity to SIP Registrar (HG1500) is lost for more than 2 minutes but WLAN connection is active. VoIP service is then disabled on phone. There is no problem, when WLAN connectivity is lost as in standard use case "leaving WLAN home zone"!