

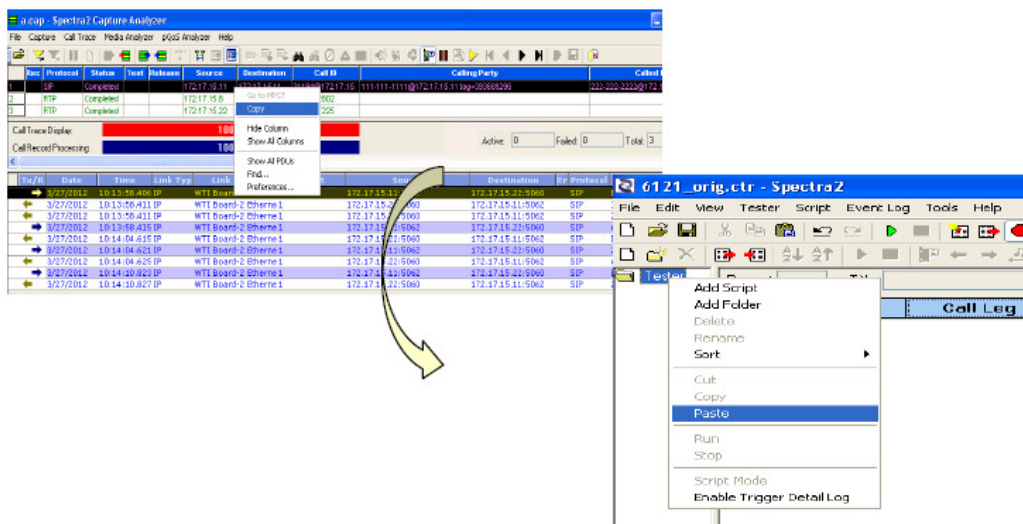
Spectra2 Release 7.6 Highlights

1. SIP Auto-Scripting

Spectra2 and Spectra2|SE² now allow you to recreate the SIP call flow from captured traffic.

USE CASES:

- ***Reproduce Production Issues accurately in minutes:*** Auto-Scripting takes the actual traffic captured in the production environment using Wireshark or Spectra2 Capture and allows it to be imported into Spectra2 test environment in minutes as PDU library and scripted test logic so that it takes into account all the idiosyncrasies of the production environment.
- ***Debug Custom Protocol Implementations with ease:*** By allowing to capture the custom protocol traffic and reproducing the call flow test script along with custom PDU library, Spectra2 facilitates the troubleshooting in custom protocol implementations.
- ***Migrate your scripts to Spectra2:*** Existing or probable customers, with large number of scripts already built into the test environment using one of the other competitive products in the industry, can now leverage on Spectra2 Auto-Scripting to recreate the scripts in the Spectra2 workspaces.



Advantages:

- Allows testing with the real time call traffic that caused the system failure
- Eliminates the possible human errors in recreating the test environment
- Improves the test team productivity by accelerating the test case creation
- Simplifies the testing of custom protocol implementations

2. LTE TS 134 229-1 Conformance Test Suite

Spectra2 7.6 now includes the workspace to test TS134-229 conformance. This is a protocol conformance test suite for the User Equipment (UE) supporting the internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP).

ETSI TS 134 229-1 V9.1.0 (2010-07)

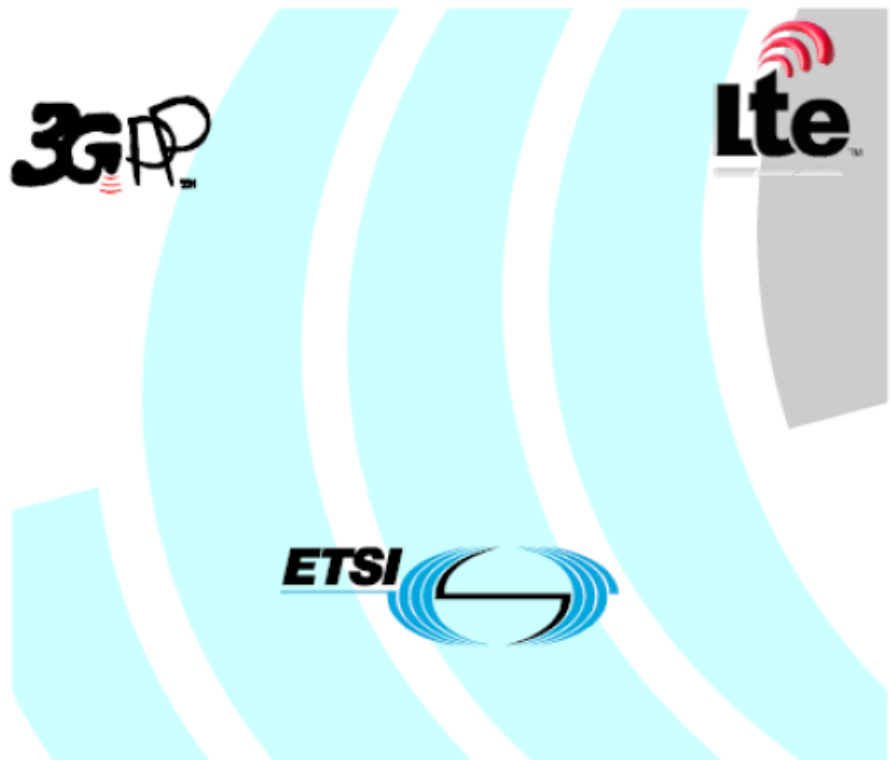
Technical Specification

CAPABILITIES:

Some of the cases you can test using this test suite are,

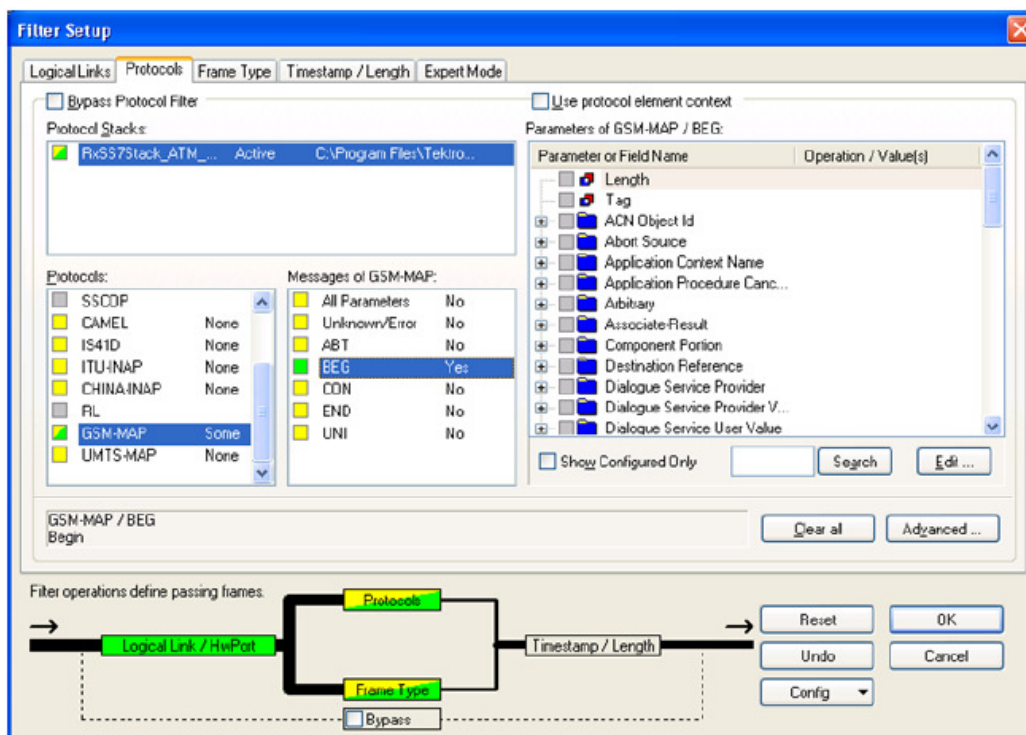
- Registration
- p-CSCF Discovery
- Authentication
- Call Control
- Supplementary Services
- Code Selection
- Media Use Cases

**Universal Mobile Telecommunications System (UMTS);
LTE;
Internet Protocol (IP) multimedia call control protocol based on
Session Initiation Protocol (SIP)
and Session Description Protocol (SDP);
User Equipment (UE) conformance specification;
Part 1: Protocol conformance specification
(3GPP TS 34.229-1 version 9.1.0 Release 9)**

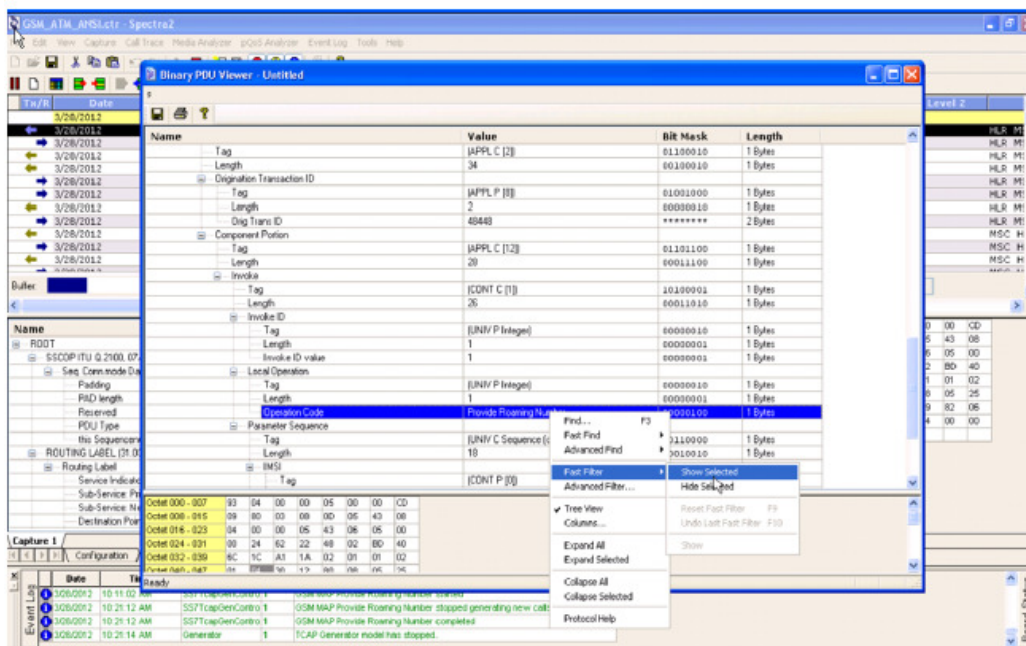


3. Advanced Find and Filters

Spectra2 and Spectra2|SE² now add more rich and friendly filter and find functionalities. Supported protocols: Binary Megaco, GSM MAP, UMTS MAP, IS41-D, AIN0.2, Capv3/v4, China INCS2 and ITU INCS2.



Advanced
Filter
Settings



Advanced
Filtering
Capabilities

4. SIP Trigger Failure Forensics

Spectra2 and Spectra2|SE² now add more visibility into test case failure analysis.

USE CASES:

- **Save time in debugging your SUT:** SIP Failure forensics gives you enough detail in a color coded fashion to ease the root cause analysis process.
- **More information into your custom test program:** Failure forensics can also be obtained from via the API, so that your custom test program can control the error detail.
- **Aid the Field Troubleshooting:** Field engineers can now export the error information and email to expert analysis back at the lab, accelerating the troubleshooting process.

Tx/R	Date	Time	Link Ty	Link Name	Cou	Source	Destination	E	Protocol	Message	Call ID	Level 2	Details
	3/28/201	1:40:54.2668	SIPCall_Orig_FailedwithMessage: -- Test Started										
←	3/28/201	1:40:54.2820	IP	WTI Board-1 Eth0/1		172.16.15.10:5060	172.16.15.10:5060		SIP	INVITE	29697@172.16.15.10	UDP/IP	Test@172.16.15.3
→	3/28/201	1:40:54.2849	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	180 Ringin	29697@172.16.15.10	UDP/IP	Test@172.16.15.3
	3/28/201	1:40:54.2862	SIPCall_Orig_FailedwithMessage: Trigger failed at line 3, Call information: 29697@172.16.15.10. Expected: Response message status code: 200, Actual: 180;										
→	3/28/201	1:40:54.7848	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	200 OK	29697@172.16.15.10	UDP/IP	Test@172.16.15.3
	3/28/201	1:40:59.7870	SIPCall_Orig_FailedwithMessage: Trigger failed at line 4, Reason: Timeout. Stop script.										
	3/28/201	1:40:59.7870	SIPCall_Orig_FailedwithMessage: -- Test Finished : Result = Failed										
	3/28/201	1:41:06.8563	SIPCall_Orig_triggerfailwithSDP: -- Test Started										
←	3/28/201	1:41:06.8660	IP	WTI Board-1 Eth0/1		172.16.15.10:5060	172.16.15.10:5060		SIP	INVITE	20063@172.16.15.10	UDP/IP	Test@172.16.15.3
→	3/28/201	1:41:06.8689	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	180 Ringin	20063@172.16.15.10	UDP/IP	Test@172.16.15.3
→	3/28/201	1:41:07.3690	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	200 OK	20063@172.16.15.10	UDP/IP	Test@172.16.15.3
	3/28/201	1:41:07.3713	SIPCall_Orig_triggerfailwithSDP: Trigger failed at line 4, Call information: 20063@172.16.15.10. Condition index 1, Expected: SDP (Body) not present, Actual: Present;										
	3/28/201	1:41:11.8700	SIPCall_Orig_triggerfailwithSDP: Trigger failed at line 4, Reason: Timeout. Stop script.										
	3/28/201	1:41:11.8700	SIPCall_Orig_triggerfailwithSDP: -- Test Finished : Result = Failed										
←	3/28/201	1:41:30.8065	IP	WTI Board-1 Eth0/1		172.16.15.10:5060	172.16.15.10:5060		SIP	INVITE / 1	01332916890000804	UDP/IP	111-111-0001@la
→	3/28/201	1:41:30.8092	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	180 Ringin	01332916890000804	UDP/IP	111-111-0001@la
→	3/28/201	1:41:31.3113	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	200 OK	01332916890000804	UDP/IP	111-111-0001@la
	3/28/201	1:41:31.3144	Trigger failed in 'SIPCall_Orig-SIP_T-AND' at line 3, Call information: 013329168900008044294967295@172.16.15.10, Condition index: 1, Expected: Equals 'testings', Received: ";Condition index: 2, Expected: Equals 'a', Received: ";										
←	3/28/201	1:41:31.8063	IP	WTI Board-1 Eth0/1		172.16.15.10:5060	172.16.15.10:5060		SIP	INVITE / 1	01332916891000805	UDP/IP	111-111-0003@la
→	3/28/201	1:41:31.8093	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	180 Ringin	01332916891000805	UDP/IP	111-111-0003@la
→	3/28/201	1:41:31.8112	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	200 OK	01332916890000804	UDP/IP	111-111-0001@la
	3/28/201	1:41:31.8144	Trigger failed in 'SIPCall_Orig-SIP_T-AND' at line 3, Call information: 013329168900008044294967295@172.16.15.10, Condition index: 1, Expected: Equals 'testings', Received: ";Condition index: 2, Expected: Equals 'a', Received: ";										
→	3/28/201	1:41:32.3094	IP	WTI Board-1 Eth0/1		172.16.15.30:5060	172.16.15.10:5060		SIP	200 OK	01332916891000805	UDP/IP	111-111-0003@la

5. Dynamic Load Adjustment

Spectra2 and Spectra2|SE² now support dynamically adjusting VoIP and PSTN traffic volume during an active load test utilizing the API interface.

USE CASES:

Automatically adjust traffic volume over time to identify capacity overload

Mimic real-time BHCA (busy hour call attempts) requirements

Simulate dynamic traffic spikes

Modify call load scenarios without restarting tests