



Intuitive signaling analysis

Businesses and consumers are increasingly sensitive to even a minor deterioration in service quality. To maintain customer satisfaction and loyalty, you and your technology teams need tools that help identify potential problems and resolve faults quickly and effectively...you need an Agilent Technologies Signaling Advisor.

Customize your Signaling Advisor to meet your monitor needs by choosing from three software packages:

- SS7 Signaling Advisor
- GSM/GPRS Signaling Advisor
- cellular/PCS Signaling Advisor

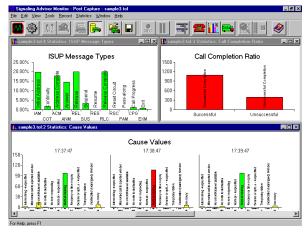
Intuitive protocol analysis, graphical statistics and graphical call trace capabilities make the Signaling Advisor the logical choice for maintenance, installation or engineering groups working with signaling related issues in telecommunications networks.

The Signaling Advisors' powerful analysis tools enable engineers to assess signaling performance, identify problems or trends or specific problem calls, and then to probe the signaling messages to find the cause.

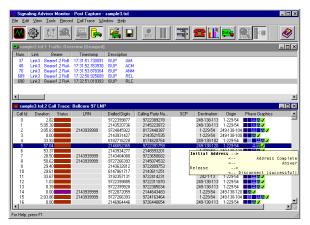
EmuLite is an option which allows the Signaling Advisor to be upgraded to a fully integrated monitor and emulation solution. EmuLite creates and executes tests faster through use of its graphical message and sequence editors. This allows engineers more time to diagnose signaling problems without the need for programming.

A free three year software upgrade package comes as standard with the Signaling Advisor.

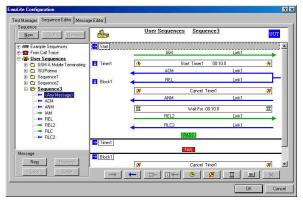
Arm your signaling engineers with Signaling Advisor - the focused and innovative test software needed to meet today's complex signaling challenges. Now, you can be sure of fast, comprehensive signaling analysis.



Graphical statistics



Call trace



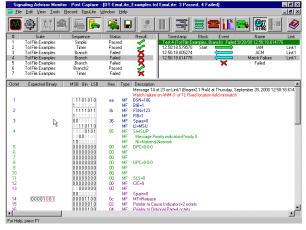
Sequence editor

	8 ×
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Key Merrore	
Call Statistics Filter	
Call Taos Filter	
Help, press F1 Files Full	ns

Triggers and filters

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M	۵.	A		🛼 🐔 🖬		🖀 <u></u>	🎫 🕵	 🛛 🤞	>		
Num.	Timestemp	Descripti	on								
163	22:15:11.348945			-UDT_BVCI+3071(dec)	BSSGPINT HUUDT TUUHO		SAPI+GMM		GPRS MM NT +OF		
194	22:15:46.899265			F=UDT_BVCI=3071(dec)	BSSGPINT HUUDT TUUH80		SAPI+GMM			EQ_TMSI=c0004008(hex)	
195	22:15:46.920101			F=UDT_BVCI=3071(dec)	BSS6P MT HOUDT TUUH80		SAPI+GMM		GPRS MM MT HR		
196	22:15:49.030357			UDT_BVCI=3071(dec)	BSS6PINT HUUDT TILLI-80		SAPI+GMM SAPI+GMM			ES INSI+262015410082789	
207	22:16:02:519669 22:16:02:539299	DUCI-16	NS MI	I+UDT_BVCI+3071(dec) I+UDT_BVCI+3071(dec)	BSS6P MT -JUDT TILI-90 BSS6P MT -DUDT TILI-90	004008(hex)	SAPI+UMM SAPI+GMM	PD+6PHS MN	GPRS MM MT 44P	EQ_TMSI=c0084008(hex)	
208	22:16:02:539299			-UDT BVCI-3071(dec)	BSSGPINT -UUDT TLLI-80		SAPI+GMM			EQ INSI#262015410092299	
16	2216/03/669952			-UDT BVCI-3071[dec]	BSSGPINT -DUDT TLLI+80		SAPI+GMM		GPRS MM MT HA		
19	22:16:11.970603			-UDT BVCI-3071(dec)	BSSGP MT -RS TLU-8000			PD+GPh5 HR	OFFICIAL REAL	E3 Greecowner al	
20				-UDT BVCI-3071(dec)	BSSGP MT -RS TLU-80004						
35	22:16:26.778816			+UDT_BVEI+3071Idec)	BSSEP MT HUUDT TILLI+80	(0)40(8lbay)	SAPI+GMM	PD+GPRS MM	GPRS MM MT -AP	EQ_TMSI=c0004008head	
236	22:16:26.799324	DLCI=16		+UDT_BVCI+3071Idec1	BSSGPINT HOUDT TUUH80		SAPI+GMM		GPBS MM MT HB		-
37	22:16:28 149944	DICI-16	NS MT	UDT_BVCI=3071ideci	BSS6P MT HUUDT TILLI-80		SAPINGMM	PD+6PBS MM	GPBS MM MT HB	ES IMSI+262015410082789	
48	22:16:41.919509			+UDT_BVCI+3071ideci	BSS6P MT HUUDT TILLI+80	004008lhext	SAPI+GMM			EQ_TMSI=c0004008/head	
49	22:16:41.939956			I+UDT_BVCI+3071[dec]	BSSGPINT +OUDT TLLI+80		SAPI+GMM		GPRS MM MT 4R		
50	22:16:43.050621			-UDT_BVCI=3071[dec]	BSSGPINT -UUDT TLLI+80		SAPI+GMM			ES IMSI+262015410092789	
57	22:16:48.182556			-UDT_BVCI=3071(dec)	BSSGP MT -DUDT TILLI-80		SAPI+GMM	PD+GPRS MM	GPRS MM MT HAP	IEJ GMMCo+NetFail	
	22:16:51.090320	DLCI-16	NS MT	-UDT_BVCI-3071(dec)	BSSGPINT HRS TLLI-80004						
61				-UDT_BVCI+3071(dec)	BSSGPINT -RS_TLU-8000-						
274	22:17:05:419277 22:17:05:439926			F=UDT_BVCI+3071(dec)	BSS6P MT HUUDT TULI+80 BSS6P MT HOUDT TULI+80		SAPI+GMM SAPI+GMM		GPRS MM MT #AP GPRS MM MT #B	EQ_TMSI=c0004008(hex)	
75	2217.05.438926	DUU=16	NSMI	+001 BVCI+30/1(dec)	BSS6P MT HOUDT TELIHOU	004008(hex)	SAPI+GMM	PD+GPHS MN	орну им ит ан	EU	
tet:	MSB Bin LSB	Hex	Type	Description							
22	00010001	01	MF	Protect Mode-Unprotect							
53	00001000	08	MF	Protocol Discriminator-GI GPRS MM Skip Indicator							
34	00000001	00	MF		 Skip Indicator nt Message Type=Attach Begu 						
8	00000001	01	MF	Length=1 octet	ni Message Type+Mach Helpu	eco.					
š	00000000	00	ME	GEA/1=Encryption algori	ten GEù (Inot available						
~	00000000	ň	MF		ated channels+MS not support	mobile terminated	P To P SMS via	dedicated size	alling changels		
	00000000	ŏŏ	MF	SM capabilities via 6PBS	channels+MS not support mob	de terminated P	To PISMS via GE	BS packet data	a channels		
	00000000	00	MF	LICS2 supports The ME Is	as a preference for the default a	Notabet over LL	\$2				
	000000000	00	MF	SS Screening Indicator-0							
	00000000	00	ME		E does not support SoLSA						
	00000000	00	MF	Spare+0(dec)							
37	01110001	00	MF	Spare+0(dec)							
	01110001	07	MF		available (MS to network);Rece	erved (network to	MS)				
	01110001	00	MF	Spare=0(dec)							
	01110801	01	MF	Type of attach+GPRS at							
	00000000	00	MF		= no DRX used by the MS						
		00	MF	Spare=0(dec)	cycle on CCCH is not supported						
38 39	00000011						I GRIAPI				
	00000011		145								
		03	MF	Non-DRX timer-max. 4 or Length=5 octets	ec non DRX mode after transfer						

Traffic overview



Test analysis

General capability summary

- Windows 98[®]-based operation
- Multitasking applications (protocol analysis, statistics, call trace)
- Real-time or post-capture analysis
- Connect to up to 16 duplex physical bearers (E1 or T1, DS0, V.35, RS-232, RS-449)
- Analyze up to 32 duplex signaling links (8/16/32/48/56/64 kb/s)
- Voice monitoring
- Link Status view
- Alarm View
- Auto-configuration identifies signaling links and protocols
- Graphical configuration and measurement setup
- Triggers and filters (logging and display)
- On-line and context sensitive help
- Protocol help

Monitor capability summary

- Graphical call trace with filters and alarms
- User-configurable, color-coded protocol decodes
- Graphical (or tabular) time-based statistics with thresholds
- Automatic message and sequence validation
- Point code interpretation
- Storage of captured data and configurations to disk
- Standalone PC software for post-capture analysis
- Timestamping to 20 microsecond resolution
- Remote Control
- Compatible with capture file formats of acceSS7 monitoring system and 37900D signaling test set
- Export data to CSV file for further 'off-site' analysis

EmuLite capability summary

- Automatic test creation copy messages and their sequence from call trace
- Graphical editor quickly create messages no more programming!
- Intelligent protocol field based editor correctly build complex signaling messages not just hex!
- Intelligent built in test manager easily manage the execution of tests
- Graphical analysis tools instantly identify failed tests and why they failed
- Copy messages from monitor application
- Easily verified network element responses
- Test all non IP-based GPRS interfaces
- Test SS7, GSM, GPRS, IS-41, CDMA, ISDN plus many more



SS7 Signaling Advisor (J4211A)

Includes basic ITU-T Blue/White book and ANSI/Telcordia SS7 protocol stacks, plus Telcordia CLASS 93, LIDB, 800, PVN, and ETSI ISUP.

GSM/GPRS Signaling Advisor (J4212A)

All of the functionality of the SS7 Signaling Advisor plus GSM Phases 1, 2 and 2+ including CAMEL and GPRS SS7.

Cellular/PCS Signaling Advisor (J4213A)

All of the functionality of the SS7 Signaling Advisor plus IS-41 B/C/D and IS-634.

Note: Software options allow you to add IN and Access Network capabilities to your Signaling Advisor, along with a wide range of national and vendor variant protocols.

Literature for Signaling Advisor

SS7 Technical specification 5988-1936EN SS7 Configuration guide 5988-1933EN GSM/GPRS Technical specification 5988-1937EN GSM/GPRS Configuration guide 5988-1934EN cellular/PCS Technical specification 5988-1938EN cellular/PCS Configuration guide 5988-1935EN

For more information refer to www.signalingadvisor.com

Related Products

The Agilent Advisor provides protocol analysis for WAN, LAN and ATM – all under one handle.

The acceSS7 monitoring system offers network-wide signaling analysis to provide a unique insight into signaling/traffic management, fraud, billing etc. MS Windows and Windows are US trademarks of Microsoft Corp.

Agilent Technologies manufactures the Signaling Advisor under a quality system approved to the international standard ISO 9001 plus TickIT (BSI Registration Certificate No FM 10987).

Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise

Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage

Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extracost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

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