

MX848055A NSL Platform

MX848055A-01 NSL Scenario Basic Pack

MX848055A-02 NSL Scenario Advanced Pack

Pre-validation of 3G UE Interoperability Testing (IOT)



Video Call



SMS

No.	Test Case	Last Execution	Last Result
✓ 1	MuCall3.4K_001 Add and Del 1RL(SameBTS) in AMR+Packet(P64/64)	1/21/2005 12:06:38 PM	Pass
✓ 2	MuCall3.6K_007 Add and Del 1RL(SameBTE) in AMR+Packet(P64/64)	1/21/2005 1:16:25 PM	Pass
✓ 3	MuCall3.6K_008 AMR Origination and Deactivation Packet(P64/64) from MS in RL(2RL_SameBTS)	1/21/2005 1:18:06 PM	Pass
✗ 4	MuCall3.6K_009 AMR Origination and Deactivation Packet(P64/64) from MS in RL(3RL_SameBTS)	1/21/2005 3:47:42 PM	Fail
✓ 5	MuCall3.6K_010 AMR Origination and Deactivation Packet(P64/64) from MS in RL(3RL_EachBTS)	1/21/2005 1:26:34 PM	Pass
6	MuCall3.6K_011 AMR Origination and Deactivation Packet(P64/64) from MS in RL(3RL_EachBTS)	1/21/2005 3:46:45 PM	Terminate
7	MuCall3.6K_012 Add 1RL(SameBTS) in AMR+Packet(P64/384)	1/21/2005 1:30:31 PM	Pass
8	MuCall3.6K_013 Add 1RL(SameBTS) in AMR+Packet(P64/128)	1/21/2005 1:32:07 PM	Pass
9	MuCall3.6K_014 Add 1RL(SameBTS) in AMR+Packet(P64/64)	1/21/2005 1:34:29 PM	Pass
✗ 10	MuCall3.6K_015 Add 1RL(SameBTS) in AMR+Packet(P64/32)	1/21/2005 3:49:16 PM	Fail



Packet



Voice Call



Features

- Dramatically reduces the costs for IOT
- Created based on operational experience of FOMA*¹ Services*²
- Reliable operation verified by a commercial 3G UE*³
- Complies with the March 2003 3GPP Specifications
- Supports Voice, Packet, Video, Multicall, and Supplementary services

*1 FOMA is a registered trademark of NTT DoCoMo, Inc.

*2 This does not assure connectivity with a real BTS.

*3 The UE was designed for NTT DoCoMo, Inc.

Pre-validation of 3G UE Interoperability Testing (IOT)

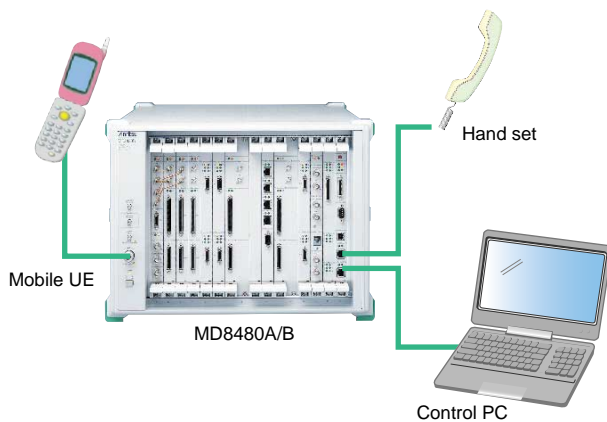
Overview

The NSL (Network Simulation Library) is a PC software product that offers pre-validation of interoperability testing (IOT) between a 3G UE and a 3G network when it is used in combination with the MD8480A/B W-CDMA Signalling Tester functioning as a BTS simulator.

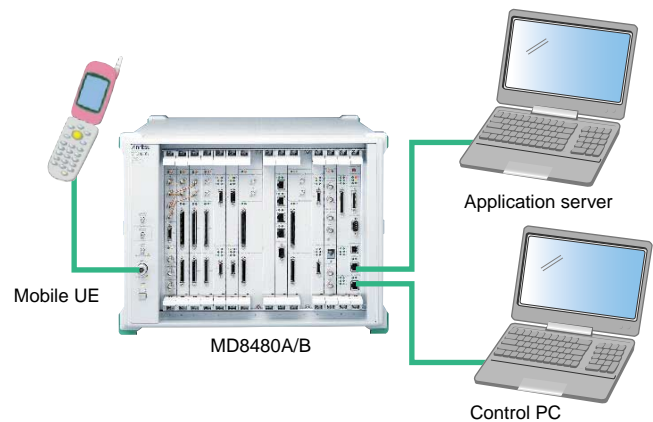
The MX848055A NSL Platform enables execution of test cases provided in the optional NSL Scenario Basic Pack (MX848055A-01) or NSL Scenario Advanced Pack (MX848055A-02) using a GUI (Graphical User Interface) execution environment with an easy-to-view display of test items and results.

The MX848055A-01 NSL Scenario Basic Pack enables simulation of the basic overall operation of various services such as Voice, Packet (IP/PPP), Video Call, SMS, and MultiCall. **The MX848055A-02 NSL Scenario Advanced Pack** enables simulation of more complex overall operation of these services, such as a handover test and rate change. Thus, tests can be performed while considering actual operation status.

Configuration of Voice testing



Configuration of Packet testing



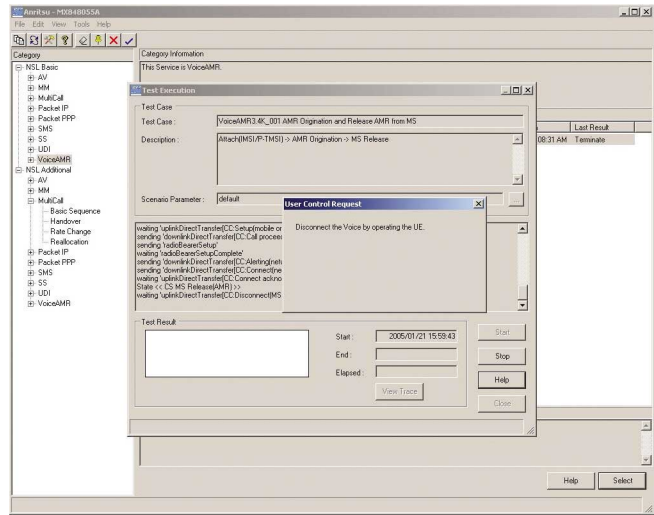
Supported Test Cases

NSL Scenario Basic Pack (91 TCs)	Video Call	Originate (UE/Network), Release (UE/Network)
	Multi Call	Voice + Packet
	Packet (IP/PPP)	Originate (UE), Release (UE/Network)
	Registration	Combined Attach (CS/PS), Detach
	SMS	Originate, Terminate
	Supplementary Service	Call Forward, Call Waiting, CLI Notification
	UDI	Originate (UE), Release (UE/Network)
	Voice (AMR) Call	Originate (UE/Network), Terminate (UE/Network)
NSL Scenario Advanced Pack (182 TCs)	Video Call	Handover, Reallocation, ReEstablish
	Periodic RA/LA Updating	
	Multi Call	Handover, Rate Change, Reallocation
	Packet (IP/PPP)	Handover, Rate Change, Periodic Cell Update, Reallocation
	Registration	Combined Attach (CS/PS)
	SMS	Handover, Reallocation
	Supplementary Service	Call Waiting, CLI Notification
	UDI	Handover, ReEstablish
Voice (AMR) Call	Handover, ReEstablish, DTMF	

Execution environment with easy-to-run test cases

The NSL Platform lets users execute a test simply by selecting and single-clicking any member of a suite of test cases arranged in categories on the execution screen.

- The categories of test cases can be displayed in a tree view, allowing for prompt execution of the intended test.
- Sub-windows allow a user to check the contents and progress of test cases.
- Pop-up windows show the UE operating procedure, enabling anyone to perform tests easily.
- Help windows allow a user to check the connection diagram for each test and details of the test contents.

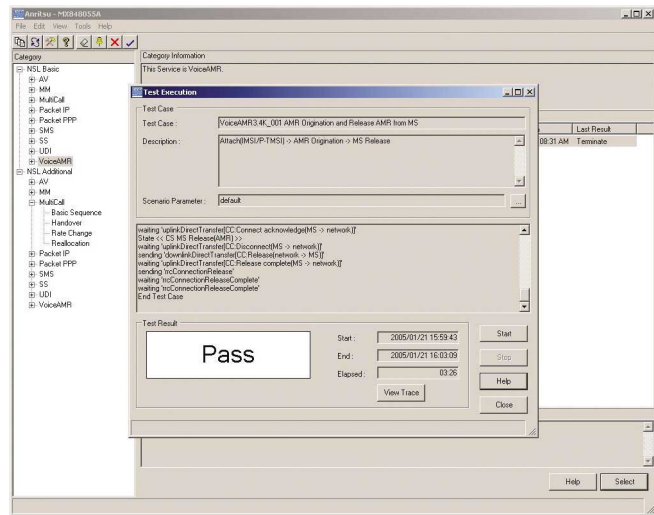


<Example of test start screen>

UE validation by highly reliable test cases

The NSL Scenario Basic Pack/Advanced Pack offer test cases complying with 3GPP and created on the basis of actual operational experience. This enables pre-validation of Interoperability Testing (IOT) by objective and highly reliable test cases, rather than by test cases created in-house, and allows final UE validation before product launch.

- All test cases have been operationally verified by a real commercial UE.
- Supports various 3G UE services.
Overall UE operational tests can be performed, including the User Plane.



<Example of test end screen>

The latest software upgrades via technical support service

Anritsu Technical Support Service (1 year, a required option) provides the latest software upgrades in conjunction with MD8480A/B version upgrades.

Also, our expert engineers will reply to your questions on product testing and other technical questions through a dedicated Email address.

Category	Category2	Test Case	Date	Judge	Scenario Parameter
NSL Additional	MuicCall	MuicCall13_9k_015 Ad1	2005/01/21 15:49:16	Fail	ScenarioParameterFa
NSL Additional	Handover	MuicCall13_9k_003 AMR D.	2005/01/21 15:47:42	Fail	ScenarioParameterFa
NSL Additional	MuicCall	MuicCall13_9k_011 AMR D.	2005/01/21 15:46:45	Terminate	ScenarioParameterFa
NSL Additional	Packet/IP	PacketIP13_9k_025 Cha	2005/01/21 15:17:32	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_045 AMR D.	2005/01/21 15:09:36	Fail	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_040 AMR T.	2005/01/21 15:04:53	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_045 AMR D.	2005/01/21 15:01:32	Fail	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_044 AMR Pa.	2005/01/21 14:59:22	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_043 MS Pa.	2005/01/21 14:57:02	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_042 AMR T.	2005/01/21 14:55:35	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_041 AMR D.	2005/01/21 14:54:05	Pass	ScenarioParameterFa
NSL Additional	Reallocation	MuicCall13_9k_040 AMR T.	2005/01/21 14:53:15	Fail	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_039 Chang	2005/01/21 14:48:11	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_038 Chang	2005/01/21 14:46:22	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_037 Chang	2005/01/21 14:44:01	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_038 Chang	2005/01/21 14:32:38	Terminate	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_037 Chang	2005/01/21 14:31:53	Terminate	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_037 Chang	2005/01/21 14:30:58	Terminate	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_037 Chang	2005/01/21 14:29:30	Terminate	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_037 Chang	2005/01/21 14:27:44	Terminate	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_036 Chang	2005/01/21 14:26:15	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_035 Chang	2005/01/21 14:24:50	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_034 Chang	2005/01/21 14:23:30	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_033 Chang	2005/01/21 14:21:39	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_032 Chang	2005/01/21 14:19:55	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_031 Chang	2005/01/21 14:18:13	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_030 Chang	2005/01/21 14:16:40	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_029 Chang	2005/01/21 14:14:56	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_028 Chang	2005/01/21 14:13:13	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_029 Chang	2005/01/21 14:10:52	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_027 Chang	2005/01/21 14:09:00	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_026 Chang	2005/01/21 14:07:20	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_025 Chang	2005/01/21 14:05:23	Fail	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_025 Chang	2005/01/21 14:03:39	Fail	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_024 Chang	2005/01/21 14:02:07	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_023 Chang	2005/01/21 14:00:35	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_022 Chang	2005/01/21 13:58:10	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_021 Chang	2005/01/21 13:56:16	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_020 Chang	2005/01/21 13:54:47	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_019 Chang	2005/01/21 13:52:49	Pass	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_018 Chang	2005/01/21 13:50:30	Fail	ScenarioParameterFa
NSL Additional	Rate Change	MuicCall13_9k_019 Chang	2005/01/21 13:48:24	Fail	ScenarioParameterFa

<Example of test result list>

Configuration

MX848055A	NSL Platform
MX848055A-01	NSL Scenario Basic Pack
MX848055A-02	NSL Scenario Advanced Pack
MX848055A-TS110	Technical Support Service
MX848055A-TS121	MX848055A-01 Technical Support Service
MX848055A-TS122	MX848055A-02 Technical Support Service

Required System

Refer to each detailed data sheet for configuration detail.

MD8480A/B	MD8480A/B Mainframe (V5.10)
	MU848053A RX Baseband
	MU848055A ISDN
	MU848057A Frame coder
	MU848058A TX baseband x 2
	MD8480A/B-02 Additional RF Unit
	MX848041A Ciphering (V5.10)
Control PC	MX848041A Ciphering (V5.10)*1
	Pentium4*2 1 GHz or more
	Memory 256 Mbyte or more
	Hard disk space 2 Gbyte or more
	Display 1024 x 768 pixel (XGA) or more
	Microsoft Internet Explorer 6.0 or later *3
	Unoccupied USB port x 1, Ethernet (100Base-TX / 10Base-T) port x 1
USIM	P0027 Test USIM (Anritsu)*4

*1 Windows2000 Professional is a registered trademark of the Microsoft Corporation.

*2 Pentium4 is a registered trademark of the Intel Corporation.

*3 Internet Explorer is a registered trademark of the Microsoft Corporation.

*4 The operation of this software has been verified by above USIM.



Specifications are subject to change without notice.

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