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| **InstantLink NE Interface for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version>** |
| **<Release x.y>** |
| **Test Plan** |
|  |

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Document Version History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Changed by | Date | Description | Checked by Accepted by |
| 1.0 |  |  | *Original version* |  |
| 1.1 |  |  | *Example*: ISS1234567 Changes to chapter 3: Modify added. |  |

Designated Access

|  |  |
| --- | --- |
| Document Owner: <PM or organisational unit and the company name>, for example: Mr. Pekka Pekkanen | |
|  |  |
|  |  |
|  |  |

This template contains basic test case examples for <Network Element Interface> (later <NE Interface>) tests.

A software engineer who implements the <NE Interface> writes also a re-usable test suite.

A test suite document contains a set of test cases that cover the specified functionality of the <NE Interface>.

A test suite can be used as such for verifying the generic < NE Interface> functionality after installation into a new environment. Test Suite document is saved in the version control of the <NE Interface> or in the <NE Interface> documentation directory. (TBD) It is updated in CR process.

A test suite must also be available for a customer specific <NE Interface>. This test suite can be used for verifying the customer specific functionality after installation into a new environment.   
  
NOTE: To obtain the re-usability aspect needed, any customer specific information is visible only in the test report level.

Replace all texts written inside brackets (< and >) with relevant information.

Name the document as follows:

InstantLink NEI for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version> [for <Customer>] <SW release version> <Document Type> <Document Version>

1. Example starts

InstantLink NEI for Lucent PSTN 5ESS 13.1 Rel 1.1 Test Suite V1.0.doc

1. Example ends
2. UPDATING THE TEST CASE INFORMATION:

Test case contains following information:

**1. Test Case ID**: Is for identifying the test cases (test case name).

**2. Priority:** There might be need for prioritize test cases on the test case importance. Example:  
  
**Priority 1** Test cases must be tested and are executed first.  
  
**Priority 2** Test cases have normal priority and are executed.  
  
**Priority 3** Test cases are additional and are executed in a lower priority to support the correct results of other test cases and the quality of the software.

**3. Test Case Objective:** Overall description of the test case and its’ purpose.

**4. Preconditions:** If there are some actions to do or to get, for example, the system under testing to some specific state before the actual test execution is possible, actions must be listed here.

**5. Test Case Instruction/Procedure:** Real steps or activities to execute the test case must be listed here. For example, move the input file to <input file directory>.

**6. Reference to Input:** If there is some file(s) that should be used during the testing, it must be defined here. For example, a request to send and can be copied to a file for re-testing.

**7. Expected Result:** Contains real verification points that must be checked to verify the test case success.

**8. Actual Result:** <Will be updated in the test report document>

**10. Comments:** This field can be used for giving information about exceptions, notes etc.

**11. Status:** <Will be updated in the test report document>

1. Example starts

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | func\_create\_mobile\_subs\_prepaid\_01 | Priority | 1 |
| Test Case objective | Is to verify that the Mobile prepaid subscriber is created successfully with the Camel services and correctly inserted into subscriber DB. | | |
| Preconditions | Subscriber is not provisioned in HLR. | | |
| Test Case Instruction /  Procedure | Send a request with the request file.  Connect straight to the HLR to check the request results or send display test case to see that subscriber was created.  Check MML log file.  (Can be checked in the InstantLink user interface) | | |
| Reference to Input | Add used request file in a high level without used values,  or write a reference where the used files are located,  or copy the files to the end of your document as an appendix.  Example  REQ\_TYPE 1  REQ\_OBJ 1  NE\_TYPE HLR  NE\_ID <NE\_ID>  IMSI1 <IMSI1>  MSISDN1 <MSISDN1>  SUBS\_PROFILE <SUBS\_PROFILE>  UPDATE\_AUC 0  UPDATE\_ONLY\_AUC 0 | | |
| Expected Result | The subscriber exists in the HLR after the command is executed and the message “Create Subscriber OK” appears in io log file. | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document>- | | |
| Status | <Will be updated in the test report document> | | |

1. Example ends

**Note:** The text inside the square brackets [] is optional

**Note:** Do not use the abbreviation NEI for NE Interface in the document itself but only in the document name.

# About This Document

This document contains chosen test scenarios and associated test cases with high level key value descriptions with which the tests can be repeated.

## Related Documentation

1. In the list below, add all documents that belong to the same set with the one you’re currently writing. Do not forget to include the version number!

The following documents give you additional information about this InstantLink NE Interface release x.y.z:

* InstantLink NE Interface for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version> Release Notes
* InstantLink NE Interface for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version> Functional Description
* InstantLink NE Interface for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version> Installation Guide

# Overview of Tests

1. Give a brief description of the test scope and target.

Summarize very briefly the main software items and features to be tested.

Identify the testing level(s) in the project.

1. Example starts

The aim of this test is to verify that the NE interface between InstantLink and the <Home Location Register (HLR)> NE is working as specified. Also, some error cases are executed as described in test cases.

The tasks are executed with the <Expect/Java> Macro Server. All results are verified from the NE task logs (mml, err, io) and directly from the network element using display tasks when possible.

1. Example ends

Filename Format

The requests are written in the Macro Server format and are saved individually in files named as follows:

<related functionality><request\_type / type>\_<target>\_<sequence>

The file name consists of the following items:

* <related functionality> is for example, func when the test case is related to provisioning functionality or mgmt when the test case is related to management
* <request\_type> is the request type in question (create, modify, delete or display)
* <type> is for example install
* <target> tells what is going to be provisioned (for example subs or service). If command names are distinguishable, they could be used here (for example command name, HGSDP)
* <sequence> is the sequence number of the test cases (for example 01 or err01 for an error case)

1. Example starts

func\_create\_subs\_01

func\_create\_subs\_err01

func\_display\_HGSDP\_01

mgmt\_install\_01

The name of the file is identical with the Test Case ID.

All the optional parameters are omitted if using of them is not mentioned in the test case.

All these test cases are executed under the InstantLink user UNIX account. It is assumed that the person who performs these test tasks is familiar with InstantLink and the maintenance and installation of the system.

1. Example ends

## Conclusions

|  |  |  |  |
| --- | --- | --- | --- |
| **Test suite** | **Number of test cases** | **Number of Passed** | **Comments** |
| Installation and Management Testing | 3 |  |  |
| NE Connection Test | 2 |  |  |
| Configuration/Parameter Testing | 1 |  |  |
| Create | 0 |  |  |
| Modify | 0 |  |  |
| Delete | 0 |  |  |
| Display | 0 |  |  |
| Extended API Test Cases | 0 |  |  |
| Total | 6 |  |  |

## Prerequisites

The following software must have been installed and configured before testing:

* Java Macro Server Release 1.4
* InstantLink NE Interface for <NE Vendor> <NE Type> <NE Product Name> <NE Product Version>

## Test Environment

|  |  |
| --- | --- |
| NEI Release and Version |  |
| Macro Server Version | Java Macro Server 1.4 |
| Host, Operating System and Version | Solaris 9 9/04 s9s\_u7wos\_09 SPARC |

## Configuration

1. Add an example configuration that can be used in testing.

This configuration is used during the tests unless otherwise stated in the test case **Preconditions**.

## Test Requirements

1. Don’t write customer or vendor-specific information to this document.

Identify the test environment and tools that can be used to repeat the interface testing.

List HW and software needed, testing tools, interface compatible simulators and external systems for testing.

List any standards and publications needed.

Identify the infrastructure and procedures for build management.

Use reference if there is a document that describes the environment.

1. List also the locations and directories for listed items
2. Example starts

Test tools are stored in:

ClearCase:

ClearCase label: >

Request files are stored in:

ClearCase:

ClearCase label: >

1. Example ends

# Installation and Management Testing

1. Write basic set of installation verification test cases.

## Install the Release Package

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | mgmt\_install\_01 | Priority |  |
| Test Case objective | This test case will verify the module installation by following the installation instructions. | | |
| Preconditions | Installation package is ready for installation to the environment.  Installation guide used for installation ready. | | |
| Test Case Instruction /Procedure | Install the packet in to the test environment according to the installation guide instructions. | | |
| Reference to Input | Installation package. | | |
| Expected Result | Installation is successful.  No errors during the installation.  Installation guide contains all needed information.  Check that NEI was installed into the correct location and the configuration files contain the new information (macro\_list.txt, phase\_codes.txt, error\_codes.txt, supp\_codes.txt).  Check that NEI related GRC parameters were added into the GRC file. | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

### Unsuccessful GRC Parameter Tests

1. Write a test case for each error message specified.

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | mgmt\_param\_err01 | Priority |  |
| Test Case Objective |  | | |
| Preconditions |  | | |
| Test case Instruction /  Procedure |  | | |
| Reference to Input |  | | |
| Expected Result |  | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

## Uninstall Release Package

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | mgmt\_uninstall\_01 | Priority |  |
| Test Case objective |  | | |
| Preconditions |  | | |
| Test Case Instruction /  Procedure |  | | |
| Reference to Input |  | | |
| Expected Result |  | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

# Functionality Testing

## NE Connection Test (Login and Logout)

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | func\_connection\_01 | Priority |  |
| Test Case objective | This test case will verify the <Macro Server> <NE / NE Simulator> connection by sending login and logout. | | |
| Preconditions |  | | |
| Test Case Instruction /Procedure |  | | |
| Reference to Input |  | | |
| Expected Result |  | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

### Unsuccessful NE Connection Test

1. Write a test case for each error message specified.

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | func\_connection\_err01 | Priority |  |
| Test Case Objective |  | | |
| Preconditions |  | | |
| Test case Instruction /Procedure |  | | |
| Reference to Input |  | | |
| Expected Result |  | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

## Configuration/Parameter Testing

1. Use this section to specify all needed test cases for Network Interface related parameters. The user of this test suite will select the test case set to be repeated.
2. Example starts

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case ID | mgmt\_display\_old\_services\_01 | Priority |  |
| Test Case objective | To test that parameters in the macro\_general section of the GRC file are working as specified. | | |
| Preconditions |  | | |
| Test Case Instruction /  Procedure | Set the display\_old\_services parameter to 0.  Set the display\_old\_services parameter to 1.  Remove the parameter from the GRC file. | | |
| Reference to Input |  | | |
| Expected | Old services are not displayed, when the parameter is set to 0. | | |
| Result | Old services are displayed when the parameter is set to 1.  When parameter is not found, the value is set to 0. Old services are not displayed. | | |
| Actual Result | <Will be updated in the test report document> | | |
| Comments | <Will be updated in the test report document> | | |
| Status | <Will be updated in the test report document> | | |

1. Example ends

## Create

## Modify

## Delete

## Display

## Extended API Test Cases

Appendix A: <Heading here>

1. Add here the request file contents. Otherwise remove this chapter. To refer to this chapter, select Insert - Reference - Cross-reference - Reference type - Bookmark and select Appendix\_A.