NPAC SMS Release 3.4.8

Turn Up Test Plan

Release 3.4.8b

June 30, 2015

Publication History

Version	Release Date	Description
3.4.8a	**May 8, 2015**	**Initial draft of NPAC Release 3.4.8 Test Cases.**
3.4.8b	**June 30, 2015**	**Revised draft of NPAC Release 3.4.8 Test Cases.**

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Preface

Purpose of this Document

The purpose of this document is to identify the NPAC Release 3.4.8 Test Cases. These Test Cases are based on NPAC SMS Release 3.4.8 requirements (Service Provider-requested Notification Suppression).

Actual Entrance and Exit criteria for test execution/completion are an agreement between individual Service Providers and the NPAC SMS vendor based upon the functionality supported by the local Service Provider SOA and/or LSMS systems.

This Test Plan contains Test Cases per functional component of the Software Release. The Test Cases cover basic Success and Error scenarios. Test Case Priority is indicated by the systems that participate in each respective Test Case. It is assumed that the NPAC SMS/NPAC personnel participate in every Test Case of the Turn Up Test Plan. If the Test Case Priority for a system is marked as **Required** that system shall participate as the Test Case describes. A Test Case Priority of **Conditional** for a system means that the system shall participate in the Test Case as described, if the respective functionality has been implemented for that system. When the Test Case Priority is marked as **Optional** for a system, it is at the discretion of the Service Provider if they use the respective system to participate in the Test Case as described. Finally, the Test Case Priority may be marked as **N/A** for a Service Provider system, which means that the functionality tested in this Test Case does not apply to this respective Service Provider system.

The different NPAC regions will turn-up Release 3.4.8 software at different times. As a result Service Providers that operate in multiple regions will need to determine when to begin using the Service Provider-requested Notification Suppression feature. This test plan does not include any guidelines or test cases for the purpose of testing backward compatibility between NPAC SMS releases.

Assumptions

All Test Cases should be executed where the Service Provider profile attributes are set such that they emulate the Service Provider's production environment unless otherwise stated in an individual test case.

Please refer to the NPAC/SMS User Profile – U.S. Mechanized User Readiness Form for the complete list of SOA and LSMS Service Provider Configurables. For Canadian Users, refer to the Canadian Mechanized User Readiness Form.

Audience

The intended audience for this document is NPAC SMS, SOA and LSMS system testers and anyone who is involved with NPAC SMS, SOA and LSMS Turn Up Certification testing. It is assumed that individuals using this test plan have an understanding of Local Number Portability, Number Pooling and related specification documents. The Test Cases are written from the XML Interface Specification (XIS) perspective so users should have an understanding of this document specifically.

Conventions Used in this Document

Test Case Template

Test Cases are the bulk of the information presented in this document. Test Cases are comprised of the following information:

A.	**TEST IDENTITY**	
	Test Case Number:	*Unique Test Case Identifier*

	Objective:	*Test Case Objective. The Title specifies re*

B.	**REFERENCES**	
	NANC Change Order Revision Number:	*If a change order revision is relevant – it's*
	NANC FRS Version Number:	*FRS version is indicated here.*
	NANC IIS Version Number:	*IIS version is indicated here.*

A.	TEST IDENTITY	
C.	PREREQUISITE	
	Prerequisite Test Cases:	*Test Case, if any, to be successfully execut*
	Prerequisite NPAC Setup:	*Steps to be executed by NPAC personnel p*
	Prerequisite SP Setup:	*Steps to be executed by Service Provider pe*
D.	TEST STEPS and EXPECTED RESULTS	
Row #	NPAC or SP	Test Step
1.	*[system indicated here]*	*This test step is described here.*
E.	Pass/Fail Analysis, TC #	
Pass	*Fail*	*NPAC personnel performed the test case a*
Pass	*Fail*	*Service Provider personnel performed the*

Test Case Numbering

Test Case Numbers are alphanumeric numbers that identify the sections of functional component based on the respective Change Order to ensure a unique Test Case number. Below is a table identifying the Change Orders that are included in this release and their associated alphanumeric numbering prefix. These test case numbers are assumed to be static:

Numeric Prefix	**Respective Functional Component**
NANC 458	Service Provider-requested Notification Suppression

Test Case Priority

Each Test Case will have an associated Test Case Priority.

Required: This Test Case represents required functionality and shall be executed by the respective Service Provider system and/or NPAC SMS Vendor.

Conditional: This Test Case represents optional functionality. If a Service Provider has implemented the suggested functionality for this respective Service Provider system in the Test Case, they shall execute the Test Case as written. If there are not any Service Providers that have implemented the functionality, and therefore cannot verify the NPAC SMS behavior, the NPAC personnel shall execute the Test Case with the use of simulators.

Optional: Service Provider may execute the Test Case as written if they have implemented the suggested functionality for this respective system. Typically 'optional' Test Cases verify 'additional' attributes of a requirement.

N/A: This Test Case does not apply to this Service Provider system. Thus the Service Provider does not need to test this respective system during this Test Case.

Test Case Prerequisites

Each Test Case contains a section for Prerequisites including Prerequisite Test Cases and/or Prerequisite NPAC Setup and/or Prerequisite SP Setup. When Prerequisite Test Cases are identified this is simply referencing a Test Case that, when appropriately executed, will setup the proper scenario for executing that respective Test Case. Prerequisite Test Cases are not a good source for Test Case ordering to ensure efficient execution. Ordering of Test Cases for efficient execution should be reviewed on a Service Provider by Service Provider basis, based on their specific suite of Test Cases for exiting Turn Up Test.

Test Case Steps and Expected Results

Test Case steps and Expected results have fields to indicate the respective systems, test steps and their expected results.

Pass/Fail Analysis

Each Test Case contains a general analysis of either Pass or Fail.

Related Documents

North American Number Council (NANC) Functional Requirements Specification Number Portability Administration Center (NPAC) Service Management System (SMS), Release 3.4.8a

NPAC SMS XML Interface Specifications NANC Version 1.6

Document Structure

This document is organized into sections as defined below:

Preface (1)	This section describes the purpose and structure of th
RSMS 3.4.8 Turn Up Test Cases (Section 2)	Test Cases – one section for each change order

Requirements for Turn-Up Testing

TUT, which includes both new NPAC/SMS Software release functionality testing and regression testing, must be performed on a developer's local system software and (optionally) on a User's local system software anytime a change is made to the interface (XSD, GDMO or ASN.1) of either the NPAC/SMS or the local system. In the event that the interface change is initiated by the NPAC/SMS, both the local system developers and (optionally) Users shall perform Turn-Up testing on each version of the local system software that a User potentially may use with the new NPAC/SMS interface.

The following sets forth the required level of testing for specific scenarios:

a. When a local product (SOA/LSMS) is compiled with the current interface model, and a new local feature (SOA/LSMS feature) is implemented that does NOT involve a change in the use of the interface model, and the NPAC/SMS is compiled with the current model, then Turn-Up Testing is optional. Test cases to be performed at the discretion of local system developers and (optionally) Users. In this situation **standard regression test cases** shall be performed.

b. When a local product (SOA/LSMS) is compiled with the current interface model, and no new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

c. When a local product (SOA/LSMS) is compiled with the new interface model, and no new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

d. When a local product (SOA/LSMS) is compiled with the new interface model, and new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the new interface model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases and new functionality test cases** shall be performed.

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e.   When a local product (SOA/LSMS) is compiled with the current interface model, and new local features are implemented that involve the interface, and the NPAC/SMS is compiled with the current model, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases and new functionality test cases** shall be performed.

f.   When the operating system software of a local product (SOA/LSMS) is upgraded, and this results in any OSI stack or CMIP toolkit change, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

g.   When the operating system of a local product (SOA/LSMS) is changed (e.g. OS vendor A to OS vendor B), then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

h.   When the hardware of a local product (SOA/LSMS) is changed, then Turn-Up Testing by local system developers and (optionally) Users is required. In this situation, **standard regression test cases** shall be performed.

Turn-Up Testing Execution Considerations

There are special test execution considerations related to R3.4.8.

All of the test steps will not be applicable in all test cases. For example, a test cycle that does include notifications being sent to the SOA will have those applicable notifications sent, whereas a test cycle that has notifications suppressed to the SOA will NOT have those applicable notifications sent.

RSMS 3.4.8 Turn Up Test Cases

NANC 458 – Service Provider-requested Notification Suppression

Tests should be executed in three cycles:

1. Set up as a SPID in a Regular configuration (standalone SPID)

2. Set up as a SPID in a Delegation configuration (Grantor-Delegate – no authorized suppression)

3. Set up as a SPID in a Delegation configuration (Grantor-Delegate – authorized suppression in both directions between grantor and delegate)

For the Delegation configuration, submit the Request multiple times (variety of no suppression, single suppression, and multiple suppression) to cover the following scenarios:

1. suppress to self (Initiator SPID)

2. suppress to parent Grantor (if Initiator SPID is a Delegate)

3. suppress to Delegates(s) (if Initiator SPID is a Grantor or one of several Delegates related to a parent Grantor)

4. suppress to the Other SPID

5. suppress to the Other SPID's Delegate(s)

Cycle 2 above (no authorized suppression) will use existing behavior (NPAC Delegation Feature), so only Create and Release test cases will be performed.

No new test cases for Service Provider-requested Notification Suppression are required. All certification testing for Service Provider-requested Notification Suppression will use existing Turn-Up Test Cases as listed below for New Service Provider and Old Service Provider:

1. NSP SV Create with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
   NANC 201-1 SOA – New Service Provider Personnel create an Inter-Service Provider Subscription Version for a single TN when the New Service Provider 'Port In Timer' and 'SP Business Type' are set to 'SHORT' and the Old Service Provider 'Port Out Timer' and 'SP Business Type' are set to 'SHORT', let the Initial Concurrence and Final Concurrence timers expire prior to Old Service Provider Concurrence – Success

2. NSP SV Modify with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.

   8.1.2.2.1.1 Modify required fields for a single TN 'pending' port with valid data. – Success (modify the New SP Due Date field to ensure an AVC is applicable to the test case)

3. NSP SV Cancel with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
   8.1.2.5.1.2 Subscription Version Cancel With Only One Create Action Received (New Service Provider SOA Mechanized Interface). – Success

4. NSP SV Cancel Concurrence with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.

8.1.2.5.1.7 Subscription Version Cancel by Service Provider SOA After Both Service Provider SOAs Have Concurred (New Service Provider's SOA Mechanized Interface)

5. NSP SV Cancel Un-Do with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
NANC 388-1 SOA – Using their SOA system, Service Provider personnel send an "un-do" cancel request to the NPAC SMS for a Subscription Version in a Cancel-Pending status for which they are either the New SP or Old SP that cancelled the SV – Success

6. NSP SV Conflict Resolution with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
NANC 201-25 SOA – New Service Provider Personnel remove a Subscription Version from Conflict when the Timer Type and Business Type are set to 'LONG' (after the Conflict Resolution New Service Provider Restriction Tunable has expired) – Success

7. NSP SV Activate with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
2.8 SOA – Service Provider Personnel activate a single SV. Their Customer TN Range Notification Indicator is set to their production value. Even though this is a single SV, the activate request results in a range notification. – Success

8. NSP SV Disconnect with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
2.19 SOA – Service Provider Personnel perform an immediate disconnect of a single active SV. Their Customer TN Range Notification Indicator is set to their production value. – Success

9. NSP Pool Block Create with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
4.1.1 SOA - Service Provider Personnel create a non-contaminated Number Pool Block – Success

10. NSP Pool Block Modify with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
4.2.1 SOA- Service Provider Personnel modify an active Number Pool Block with the SOA Origination Indicator set to FALSE (and contains Subscription Versions with LNP Types of 'POOL', 'LISP' and 'LSPP'). – Success
Also perform test 4.2.1 with SOA Origination Indicator set to TRUE

11. OSP SV Create with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
8.1.2.1.1.32 Create inter-service provider 'pending' port (concurrence) of a single TN via the SOA Mechanized Interface. – Success

12. OSP SV Modify with notification suppression TRUE in some cycles and

configurations, and FALSE in other cycles and configurations.

218-1 SOA – (Old) Service Provider Personnel submit a single TN, subscription version modify request specifying Authorization (FALSE) and a valid status change cause code, setting the subscription version status to conflict after both Service Providers have created/concurred to the port, and prior to the Conflict Restriction Window - SUCCESS

13. OSP SV Cancel with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
2.27 SOA – Old Service Provider Personnel cancel a single SV. Their Customer TN Range Notification Indicator is set to their production value. In the pre-requisite create process only the Old SP has submitted a create request. Even though this is a single SV, the cancel request results in a range notification. – Success

14. OSP SV Cancel Concurrence with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
8.1.2.5.1.6 Subscription Version Cancel by Service Provider SOA After Both Service Provider SOAs Have Concurred (Old Service Provider's SOA Mechanized Interface)

15. OSP SV Cancel Un-Do with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.
NANC 388-1 SOA – Using their SOA system, Service Provider personnel send an "un-do" cancel request to the NPAC SMS for a Subscription Version in a Cancel-Pending status for which they are either the New SP or Old SP that cancelled the SV – Success

Test Case "Success" definition:

- When Notification Suppression is set to TRUE,

    - and requesting SPID is authorized by suppressed SPID to suppress – notifications are **suppressed**

    - and requesting SPID is NOT authorized by suppressed SPID to suppress – notifications are **sent**

- When Notification Suppression is set to FALSE,

    - and requesting SPID is authorized by suppressed SPID to suppress – notifications are **sent**

    - and requesting SPID is NOT authorized by suppressed SPID to suppress – notifications are **sent**

For Example, in test case 8.1.2.2.1.1 (Modify required fields for a single TN 'pending' port with valid data. – Success) test steps 4, 5, 6, and 7 would apply when notifications should be sent, and would not apply when notifications should be suppressed.

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Step Result-4: NPAC SMS issues an M-EVENT-REPORT attributeValueChange in CMIP (or VATN – SvAttributeValueChangeNotification in XML) to the Old Service Provider SOA.

Step Result-5: The Old Service Provider SOA returns M-EVENT-REPORT confirmation in CMIP (or NOTR – NotificationReply in XML) to the NPAC SMS.

Step Result-6: NPAC SMS issues M-EVENT-REPORT attributeValueChange in CMIP (or VATN – SvAttributeValueChangeNotification in XML) to the New Service Provider SOA.

Step Result-7: The New Service Provider SOA returns M-EVENT-REPORT confirmation in CMIP (or NOTR – NotificationReply in XML) to the NPAC SMS.

Optionally, any additional tests may be executed with Notification Suppression set to TRUE or FALSE, and authorization given or not given by suppressed SPID.

Appendix A: Test Case Matrix

NANC 458 – Service Provider-requested Notification Suppression

Test Case Priority	**Test Case #**	**Test Case Description**

NANC 458 – Service Provider-requested Notification Suppression		
SOA - Required	Exist-ing	NANC 201-1 SOA – New Service Provider Personnel create an Inter-Service Provider Subscription Version for a single TN when the New Service Provider 'Port In Timer' and 'SP Business Type' are set to 'SHORT' and the Old Service Provider 'Port Out Timer' and 'SP Business Type' are set to 'SHORT', let the Initial Concurrence and Final Concurrence timers expire prior to Old Service Provider Concurrence – Success 8.1.2.2.1.1 Modify required fields for a single TN 'pending' port with valid data. – Success 8.1.2.5.1.2 Subscription Version Cancel With Only One

NANC 458 – Service Provider-requested Notification Suppression

LSMS – N/A

NANC 458 – Service Provider-requested Notification Suppression		
SOA - Required	Exist-ing	4.1.1 SOA - Service Provider Personnel create a non-contaminated Number Pool Block – Success 4.2.1 SOA-Service Provider Personnel modify an active Number Pool Block with the SOA Origination Indicator set to FALSE (and contains Subscription Versions with LNP Types of 'POOL', 'LISP' and 'LSPP'). – Success Also perform test 4.2.1 with SOA Origination Indicator set to TRUE 8.1.2.1.1.32 Create inter-service provider 'pending' port (concurrence) of a single TN via the SOA Mechanized Interface. – Success 218-1 SOA – (Old) Service

Appendix B: Test Plan Issues

Following are issues related to the NPAC Release 3.4.8 Test Plan:

#	Date	Issue	Status