**Origination Date:** 09/10/2019

**Originator:** iconectiv

### Change Order Number: NANC 547

**Description:** Vendor Certification and Regression Test Plan – doc-only updates

**Functional Backwards Compatible:** Yes

**IMPACT/CHANGE ASSESSMENT**

|  |  |  |
| --- | --- | --- |
| DOC | FRS | IIS |
| N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CMIP | GDMO | ASN.1 | **NPAC** | SOA | LSMS |
| N | N | N | N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| XML | XIS | XSD | **NPAC** | SOA | LSMS |
| N | N | N | N | N |

**Business Need**

Prior to the NPAC Transition, a separate test plan document outside of the Certification and Regression Testing Plan was developed to test Notification Suppression (for delegate/grantor related transactions in XML) in NANC Release 3.4.8. In order to provide a single documentation set associated with Vendor Certification and Regression testing, the contents of the NPAC SMS Release 3.4.8 Turn Up Test Plan needs to be incorporated into the Vendor Certification and Regression Test Plan documentation. Also see PIM 125.

**Description of Change:**

Changes listed below.

Vendor Certification and Regression Test Plan Updates:

With NPAC SMS Release 3.4.8, Notification Suppression was supported and a separate test plan developed to test that feature. This test plan repeated many of the introductory sections found in the Vendor Certification and Regression Test Plan and do not need to be included in the Vendor Certification and Regressin Test Plan.

The Release 3.4.8 Notification Suppression Test Plan laid out a strategy for testing Notification Suppression using existing Test Cases that are run under different scenarios. No new Test Cases were introduced. This strategy will become a new sub-chapter of Chapter 15 in the Vendor Certification and Regression Test Plan. The individual test cases identified for in this strategy will be updated to indicate that if the System Under Test supports XML notification suppression, then TC needs to be run/re-run as outlined in the new subchapter of Chapter 15.

**New Chapter 15. Subsection 5 Contents:**

**5. NANC 458 – Service Provider Requested Notification Suppression**

This section contains a testing strategy designed for Vendor Certification and Regression testing of Release 3.4.8 of the NPAC software. NPAC Release 3.4.8 included the implementation of NANC 458, Service Provider Requested Notification Suppression. This testing strategy involves no new test cases, instead relying on existing test cases that will be repeated under different conditions as described below.

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.

Suppression options are defined in the table below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Suppress Notifications Options:** | | | | |
| **Role of SPID Sending Request** | **Self (Initiator)** | **Grantor** | **Delegate(s)** | **Other SPID** | **Delegate(s) of Other SPID** |
|  |  |  |  |  |  |
| **BAU SPID** | Y | N/A | N/A | Y | Y |
| **Delegate** | Y | Y | Y | Y | Y |
| **Grantor** | Y | N/A | Y | Y | Y |
|  |  |  |  |  |  |
| (shading) | = Authorization required from the SPID being suppressed | | | | |

All testing for Service Provider-requested Notification Suppression will use existing Vendor Certification and Regression Test Cases as listed below for New Service Provider and Old Service Provider. All of the below Test Cases are run for Certification Testing. Many of the Test Cases below are also identified as Regression Test Cases in Chapter 7 – this means they are run in Regression Testing with a SPID in standalone confliguration (Delegation feature not turned on). The ones identified as (Notification Suppression Regression) are Regression Test Cases used to Regression Test the Notification Suppression feature (Delegation feature turned on and Notification Suppression scenarios tested).

(Also note, the first test case below – Ch 9, NANC 201-1, is not identified as a Regression Test Case in chapter 7, but this will be changed to be a Regression Test Case.)

1. NSP SV Create with notification suppression TRUE in some cycles and configurations, and FALSE in other cycles and configurations.  
   *Chapter 9, NANC 201-1 (Notification Suppression Regression) 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.  
    *Chapter 8, 8.1.2.2.1.1 (Notification Suppression Regression) 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.  
    *Chapter 8, 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.  
    *Chapter 8, 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.  
    *Chapter13, 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.  
    *Chapter 9, 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.  
    *Chapter 11, 2.8 (Notification Suppression Regression) 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.  
   *Chapter 11, 2.19 (Notification Suppression Regression) 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.  
    *Chapter 10, 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.  
     *Chapter 10, 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.  
     *Chapter 8, 8.1.2.1.1.32 (Notification Suppression Regression) 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.  
     *Chapter 12, 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.  
     *Chapter 11, 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.  
     *Chapter 8, 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.  
     *Chapter 13, 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.

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.

The following table summarizes the Test Cases identified, all of them being required for Certification Testing and the subset that is required for Regression Testing. The footnotes below the table identify how Regression Tests are performed.

|  |  |  |  |
| --- | --- | --- | --- |
| Test Case Type and ID | Certification | Regression |  |
| NSP SV Create (Ch 9, NANC 201-1) | X | X\* | - |
| NSP SV Modify (Ch 8, 8.1.2.2.1.1) | X | X\* | - |
| NSP SV Cancel (Ch 8, 8.1.2.5.1.2) | X |  |  |
| NSP SV Cancel Concurrence (Ch 8, 8.1.2.5.1.7) | X | X |  |
| NSP SV Cancel Un-do (Ch 13, NANC 388-1) | X | X |  |
| NSP SV Conflict Resolution (Ch 9, NANC 201-25) | X |  |  |
| NSP SV Activate (Ch 11, 2.8) | X | X\* | - |
| NSP SV Disconnect (Ch 11, 2.19) | X | X\* | - |
| NSP Pool Block Create (Ch 10, 4.1.1) | X | X |  |
| NSP Pool Block Modify (Ch 10, 4.2.1) | X | X |  |
| OSP SV Create (Ch 8, 8.1.2.1.1.32) | X | X\* | - |
| OSP SV Modify (Ch 12, 218-1) | X |  |  |
| OSP SV Cancel (Ch 11, 2.27) | X | X |  |
| OSP SV Cancel Concurrence (Ch 8, 8.1.2.5.1.6) | X |  |  |
| OSP SV Cancel Un-do (Ch 13, NANC 388-1) | X | X |  |

“X\*” in the Regression column indicates the associated Test Case uses the Notification Suppression testing strategy identified in this Section when Regression Testing.

“X” in the Regression column indicates the associated Test Case does normal Regression Testing (as a standalone SPID without Notification Suppression).

For each of the Notification Suppression related test cases identified above, make the following statement in the objective of the related test case.

“Note - If the system under test is an XML SOA that supports Notification Suppression, then you must exercise this test case multiple times for different notification suppression scenarios as defined in Chapter 15, Section 5, NANC 458 of this test plan for Certification Testing and Regression Tesing (only include “and Regression Testing” at the end of this statement for those Test Cases identified above as Regression).”

For example, the objective of first Test Case identified above, NANC 201-1 in chapter 9 will change as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **TEST IDENTITY** | | | |
| **Test Case Number:** | **NANC 201-1** | **Priority:** | Conditional | |
| **Objective:** | SOA – New Service Provider Personnel create an Inter-Service Provider Subscription Version for a single TN when the New Service Provider ‘Port In Timer’ is set to ‘SHORT’ and ‘SP Business Hours’ is set to ‘NORMAL’ and the Old Service Provider ‘Port Out Timer’ is set to ‘SHORT’ and ‘SP Business Hours’ is set to ‘NORMAL, let the Initial Concurrence and Final Concurrence timers expire prior to Old Service Provider Concurrence – Success  Note - If the system under test is an XML SOA that supports Notification Suppression, then you must exercise this test case multiple times for different notification suppression scenarios as defined in Chapter 15, Section 5, NANC 458 of this test plan for Certification Testing and Regression Testing. | | | |

Chapter 7 of the Test Plan that identifies all of the test cases and their involvement in Certification and Regression Testing will be updated to identify the potential need to execute the above identified test cases for XML systems that support Notification Suppression.

# 7. Vendor Certification and Regression Test Case Matrix:

This section contains a matrix of all test cases written and defined for Vendor Certification and Regression testing.

**NOTE:** With the NANC 458 XML Notification Suppression Feature, although no new Test Cases were introduced, a new Chapter to the Test Plan, Chapter 15, Section 5 was incorporated that identifies a strategy for testing Notification Suppression using existing Test Cases. If an XML system under test supports Notification Suppression, then the identified Test Cases may need to be run multiple times under different notification suppression scenarios as outlined in Chapter 15, Section 5. The applicable Test Cases are identified in Chapter 15, Section 5, but to aid the users of this Chapter 7 Test Case Matrix, the Objective of the impacted test cases will be augmented with a pointer to this Note.

An example:

|  | **New**  **Entrant** | **Re-gression** | **CMIP SOA** | **CMIP LSMS** | **XML SOA** | **XML LSMS** |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case Objective** | **New Vendor** | **Exp Vendor** |  |  |  |  |
| 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  See the NOTE at the beginning of Chapter 7 for Notification Suppression Testing involvement. | **X** | **X** | **X** |  | **X** |  |