

**Open Service Access (OSA);  
Application Programming Interface (API);  
Test Suite Structure and Test Purposes (TSS&TP);  
Part 14: Presence and Availability Management SCF;  
(Parlay 4)**

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Reference

DES/TISPAN-06004-14-OSA

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Keywords

API, OSA, TSS&TP

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## Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document is part 14 of a multi-part deliverable. Full details of the entire series can be found in part 1 [6].

To evaluate conformance of a particular implementation, it is necessary to have a set of test purposes to evaluate the dynamic behaviour of the Implementation Under Test (IUT). The specification containing those test purposes is called a Test Suite Structure and Test Purposes (TSS&TP) specification.

---

# 1 Scope

The present document provides the Test Suite Structure and Test Purposes (TSS&TP) specification for the Presence and Availability Management SCF of the Application Programming Interface (API) for Open Service Access (OSA) defined in ES 202 915-14 [1] in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-2 [4] and ETS 300 406 [5].

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

- [1] ETSI ES 202 915-14: "Open Service Access (OSA); Application Programming Interface (API); Part 14: Presence and Availability Management SCF (Parlay 4)".
- [2] ETSI ES 202 363: "Open Service Access (OSA); Application Programming Interface (API); Implementation Conformance Statement (ICS) proforma specification; (Parlay 4)".
- [3] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [4] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [5] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [6] ETSI ES 202 388-1: "Open Service Access (OSA); Application Programming Interface (API); Test Suite Structure and Test Purposes (TSS&TP); Part 1: Overview; (Parlay 4)".

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# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in ES 202 915-14 [1], ISO/IEC 9646-1 [3], ISO/IEC 9646-2 [4] and the following apply:

**abstract test case:** Refer to ISO/IEC 9646-1 [3].

**Abstract Test Method (ATM):** Refer to ISO/IEC 9646-1 [3].

**Abstract Test Suite (ATS):** Refer to ISO/IEC 9646-1 [3].

**Implementation Under Test (IUT):** Refer to ISO/IEC 9646-1 [3].

**Lower Tester (LT):** Refer to ISO/IEC 9646-1 [3].

**Implementation Conformance Statement (ICS):** Refer to ISO/IEC 9646-1 [3].

**ICS proforma:** Refer to ISO/IEC 9646-1 [3].

**Implementation eXtra Information for Testing (IXIT):** Refer to ISO/IEC 9646-1 [3].

**IXIT proforma:** Refer to ISO/IEC 9646-1 [3].

**Test Purpose (TP):** Refer to ISO/IEC 9646-1 [3].

## 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

API	Application Programming Interface
ATM	Abstract Test Method
ATS	Abstract Test Suite
ICS	Implementation Conformance Statement
IUT	Implementation Under Test
IXIT	Implementation eXtra Information for Testing
LT	Lower Tester
OSA	Open Service Access
PAM	Presence and Availability Management
SCF	Service Capability Feature
TP	Test Purpose
TSS	Test Suite Structure

---

## 4 Test Suite Structure (TSS)

- Presence and Availability Management
  - PAM Access Service
  - PAM Event Handler

---

## 5 Test Purposes (TP)

### 5.1 Introduction

For each test requirement a TP is defined.

#### 5.1.1 TP naming convention

Tps are numbered, starting at 01, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite (see table 1).

**Table 1: TP identifier naming convention scheme**

Identifier: <suite_id>_<group>_<nnn>	
<suite_id>	= SCG name: "PAM" for <b>Presence and Availability Management SCF</b>
<group>	= group number: two character field representing the group reference according to TSS
<nn>	= sequential number: (01 to 99)

#### 5.1.2 Source of TP definition

The TPs are based on ES 202 915-14 [1].

### 5.1.3 Test strategy

As the base standard ES 202 915-14 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the ICS specification ES 202 363 [2].

The TPs are only based on conformance requirements related to the externally observable behaviour of the IUT and are limited to conceivable situations to which a real implementation is likely to be faced (see ETS 300 406 [5]).

## 5.2 TPs for the Presence and Availability Management SCF

All ICS items referred to in this clause are as specified in ES 202 363 [2] unless indicated otherwise by another numbered reference.

All parameters specified in method calls are valid unless specified.

The procedures to trigger the SCF to call methods in the application are dependant on the underlying network architecture and are out of the scope of the present document. Those method calls are preceded by the words "Triggered action".

### 5.2.1 Presence and Availability Management, SCF side

#### 5.2.1.1 PAM Access Service

##### 5.2.1.1.1 IpPAMPresenceAvailabilityManager

Precondition: IpPAMPresenceAvailabilityManager supported.

##### **Test PAM\_AS\_01**

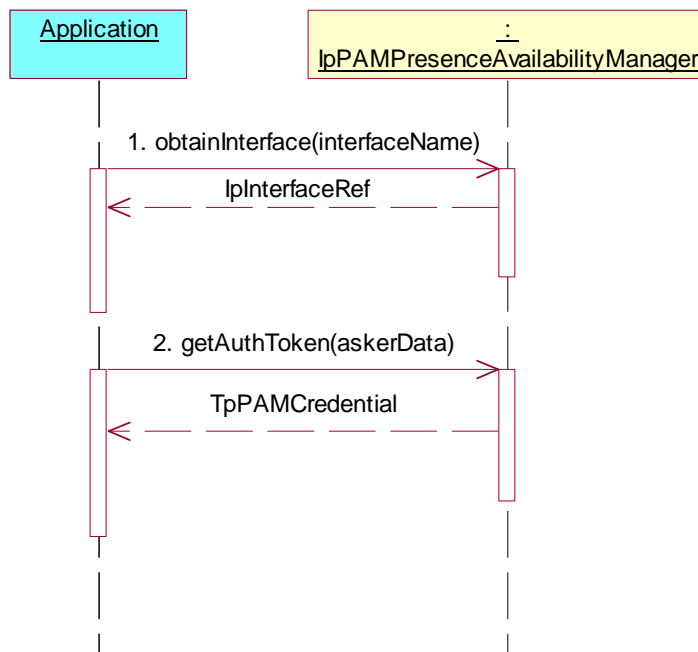
Summary: **IpPAMPresenceAvailabilityManager**, obtainInterface and getAuthToken successful.

Reference: ES 202 915-14 [1], clause 8.2.1.

Preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMPresenceAvalibilityManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call obtainInterface()  
Parameters: interfaceName  
Check: valid value of IpInterfaceRef is returned
2. Method call getAuthToken()  
Parameters: askerData  
Check: valid value of TpPAMCredential is returned



### Preamble\_getAuthToken\_AS

Summary: Preamble to obtain the authentication token.

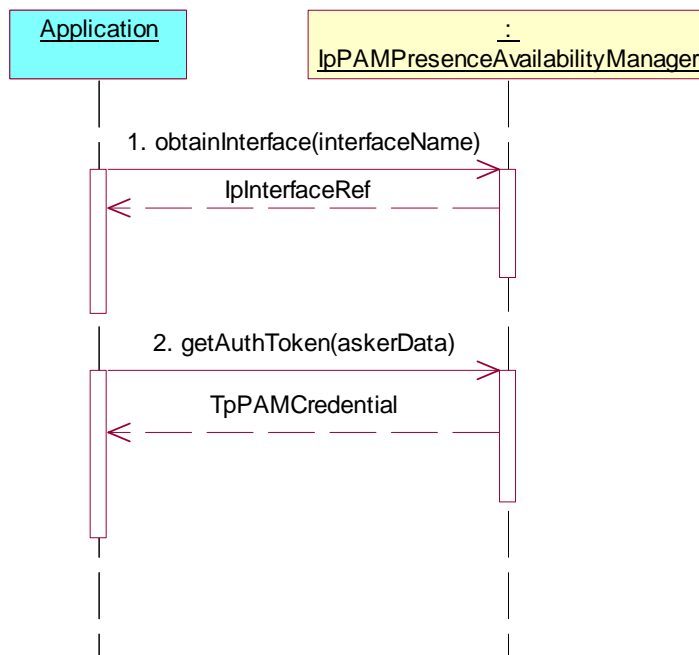
Reference: ES 202 915-14 [1], clause 8.2.

Pre-preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMPresenceAvailabilityManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call obtainInterface()
  - Parameters: interfaceName
  - Check: valid value of IpInterfaceRef is returned
2. Method call getAuthToken()
  - Parameters: askerData
  - Check: valid value of TpPAMCredential is returned





### Test PAM\_AS\_02

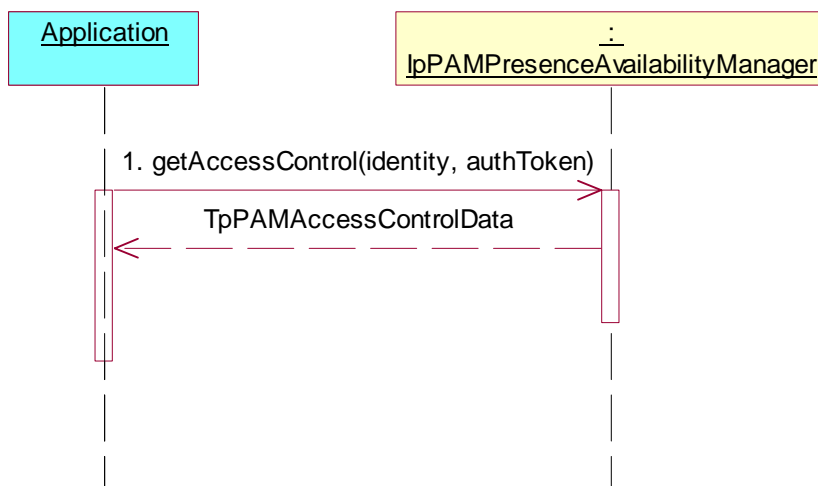
Summary: **IpPAMPresenceAvailabilityManager**, getAccessControl successful.

Reference: ES 202 915-14 [1], clause 8.2.1.3.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call getAccessControl()  
 Parameters: identity, authToken as obtained in Preamble  
 Check: valid value of TpPAMAccessControlData is returned



**Test PAM\_AS\_03**

Summary: **IpPAMPresenceAvailabilityManager**, getAccessControl and setAccessControl successful.

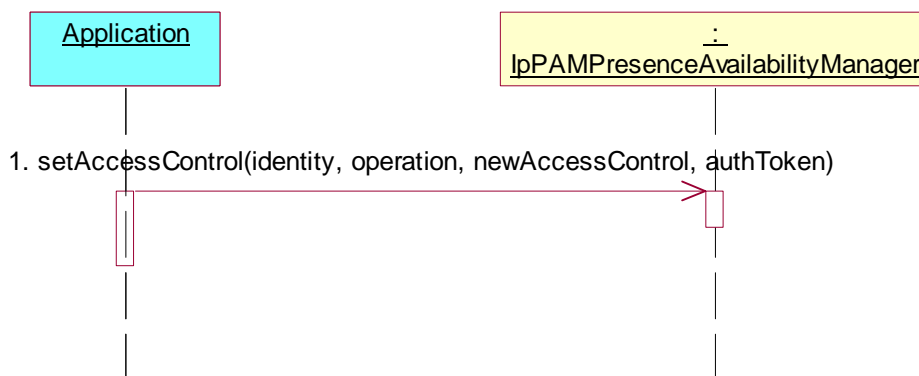
Reference: ES 202 915-14 [1], clause 8.2.1.4.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setAccessControl()**  
Parameters: identity, operation, newAccessControl, authToken as obtained in Preamble  
Check: no exception returned

NOTE: setAccessControl() can be used in conjunction with getAccessControl().

**5.2.1.1.2 IpPAMIdentityPresence**

Precondition: IpPAMIdentityPresence supported.

**Test PAM\_AS\_04**

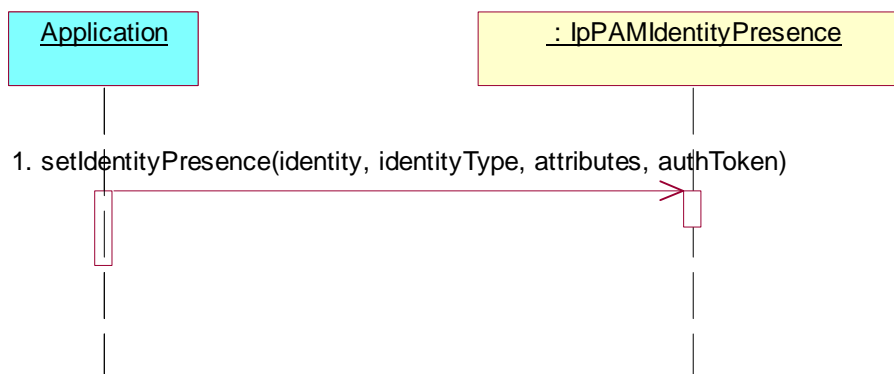
Summary: **IpPAMIdentityPresence**, setIdentityPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.2.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setIdentityPresence()**  
Parameters: identity, identityType, attributes, authToken as obtained in Preamble  
Check: no exception returned



**Test PAM\_AS\_05**

Summary: **IpPAMIdentityPresence**, setIdentityPresenceExpiration successful.

Reference: ES 202 915-14 [1], clause 8.2.2.2.

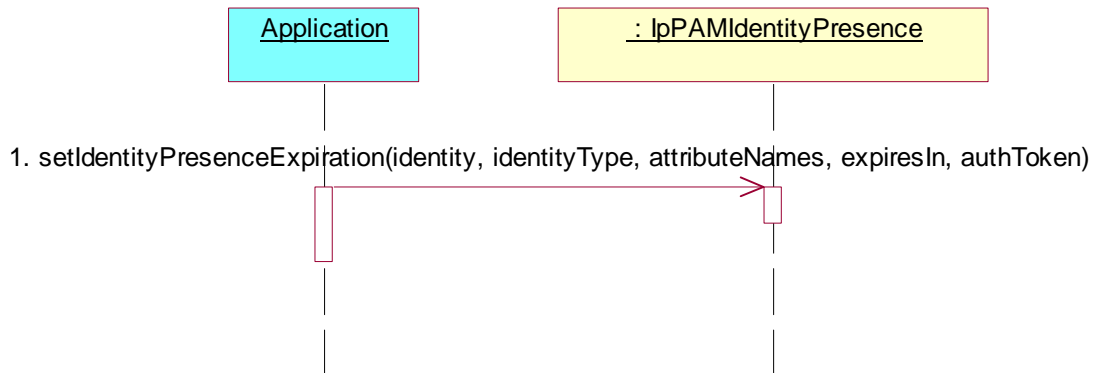
Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **setIdentityPresenceExpiration()**

Parameters: identity, identityType, attributeNames, expiresIn, authToken as obtained in Preamble

Check: no exception returned

**Test PAM\_AS\_06**

Summary: **IpPAMIdentityPresence**, getIdentityPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.2.3.

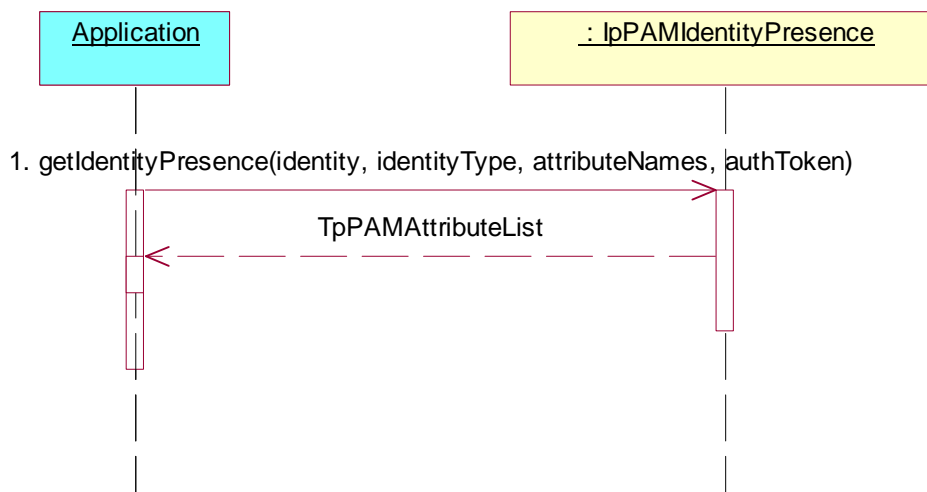
Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **getIdentityPresence ()**

Parameters: identity, identityType, attributeNames, authToken as obtained in Preamble

Check: valid value of TpPAMAttributeList is returned



### 5.2.1.1.3 IpPAMAvailability

Precondition: IpPAMAvailability supported.

#### Test PAM\_AS\_07

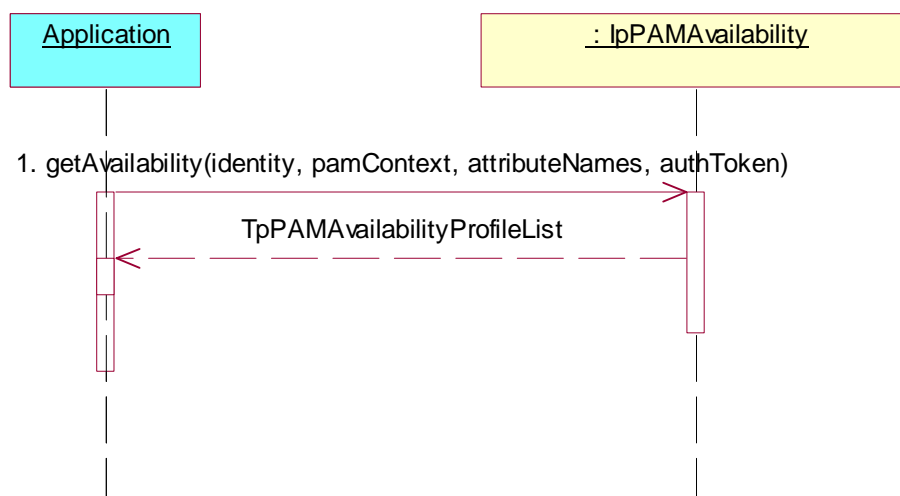
Summary: **IpPAMAvailability**, getAvailability successful.

Reference: ES 202 915-14 [1], clause 8.2.3.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **getAvailability()**  
Parameters: identity, pamContext, attributeNames, authToken as obtained in Preamble  
Check: valid value of TpPAMAvailabilityProfileList is returned



#### Test PAM\_AS\_08

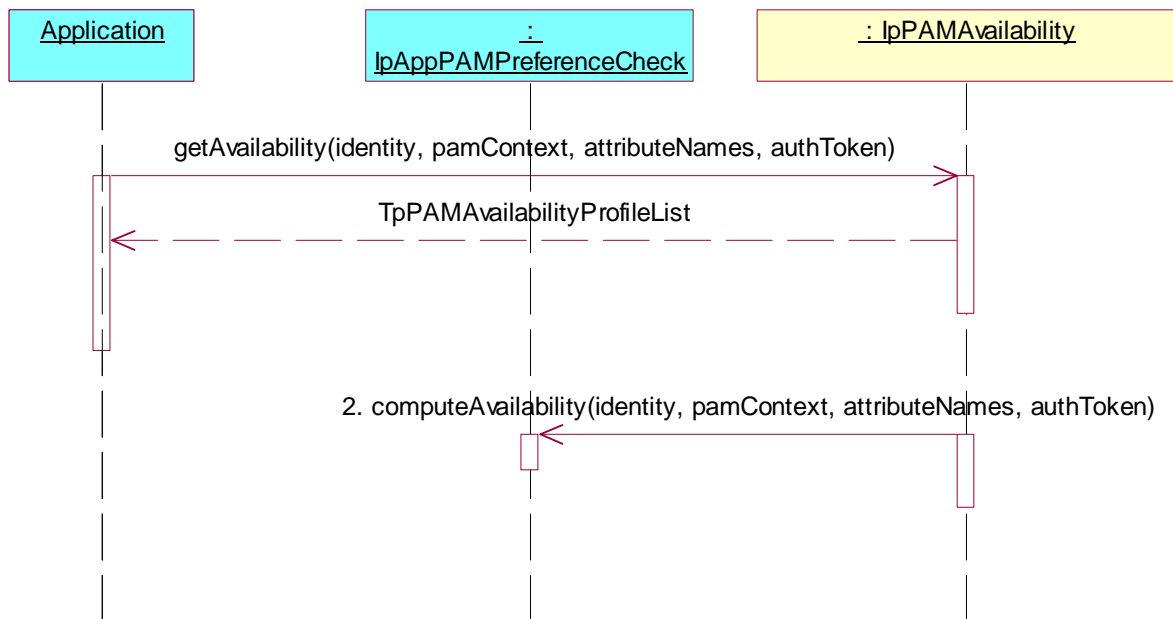
Summary: **IpPAMAvailability**, getAvailability successful.

Reference: ES 202 915-14 [1], clause 8.2.3.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **getAvailability()**  
Parameters: identity, pamContext, attributeNames, authToken as obtained in Preamble  
Check: valid value of TpPAMAvailabilityProfileList is returned
- Triggered action: cause IUT to call **computeAvailability()** method on the tester's (Application) **IpAppPAMPreferenceCheck** interface.  
Parameters: identity, pamContext, attributeNames, authToken.



### Test PAM\_AS\_09

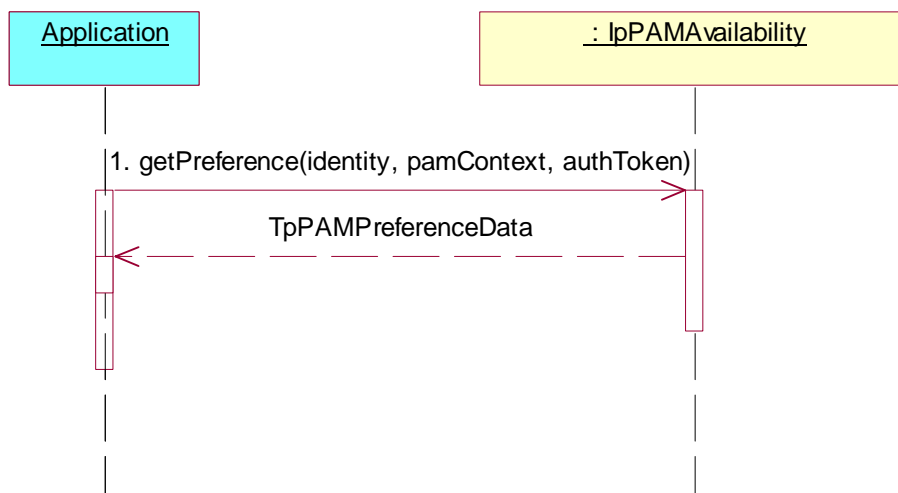
Summary: **IpPAMAvailability**, getPreference successful.

Reference: ES 202 915-14 [1], clause 8.2.3.2.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **getPreference()**  
 Parameters: identity, pamContext, authToken as obtained in Preamble  
 Check: valid value of TpPAMPreferenceData is returned



**Test PAM\_AS\_10**

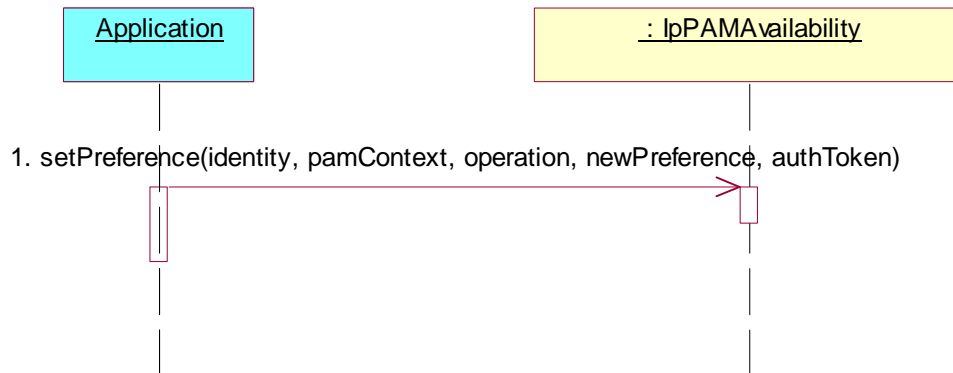
Summary: **IpPAMAvailability**, setPreference successful.

Reference: ES 202 915-14 [1], clause 8.2.3.3.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setPreference()**  
 Parameters: identity, pamContext, operation, newPreference, authToken as obtained in Preamble  
 Check: valid value of TpPAMPreferenceData is returned

**5.2.1.1.4 IpPAMAgentPresence**

Precondition: IpPAMAgentPresence supported.

**Test PAM\_AS\_11**

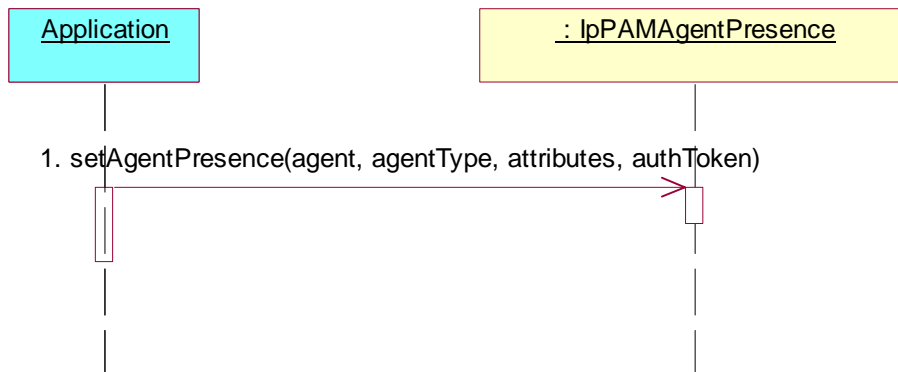
Summary: **IpPAMAgentPresence**, setAgentPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.4.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setAgentPresence()**  
 Parameters: agent, agentType, attributes, authToken as obtained in Preamble  
 Check: no exception returned



**Test PAM\_AS\_12**

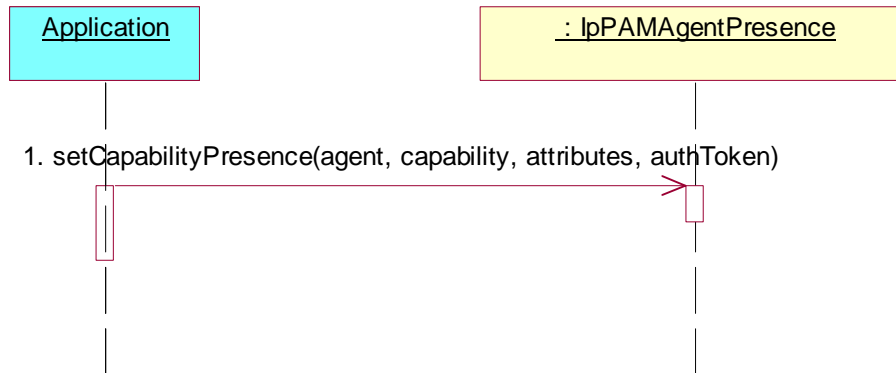
Summary: **IpPAMAgentPresence**, setCapabilityPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.4.2.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setCapabilityPresence()**  
 Parameters: agent, capability, attributes, authToken as obtained in Preamble  
 Check: no exception returned

**Test PAM\_AS\_13**

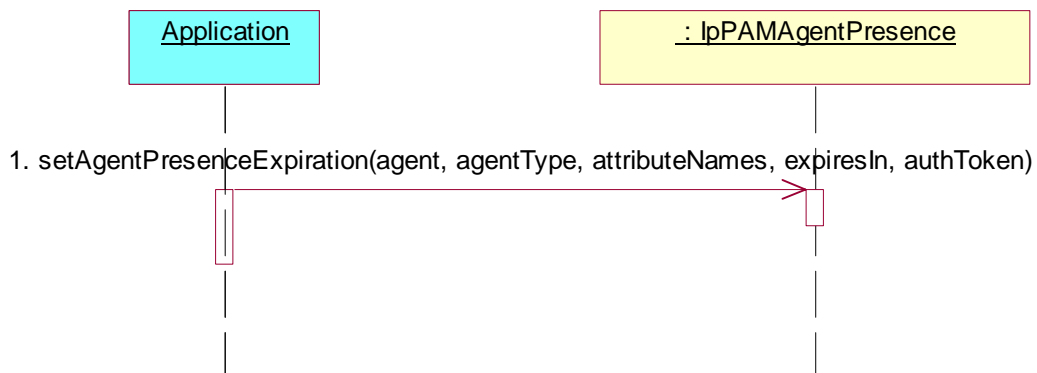
Summary: **IpPAMAgentPresence**, setAgentPresenceExpiration successful.

Reference: ES 202 915-14 [1], clause 8.2.4.3.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

- Method call **setAgentPresenceExpiration()**  
 Parameters: agent, agentType, attributeNames, expiresIn, authToken as obtained in Preamble  
 Check: no exception returned



**Test PAM\_AS\_14**

Summary: **IpPAMAgentPresence**, setCapabilityPresenceExpiration successful.

Reference: ES 202 915-14 [1], clause 8.2.4.4.

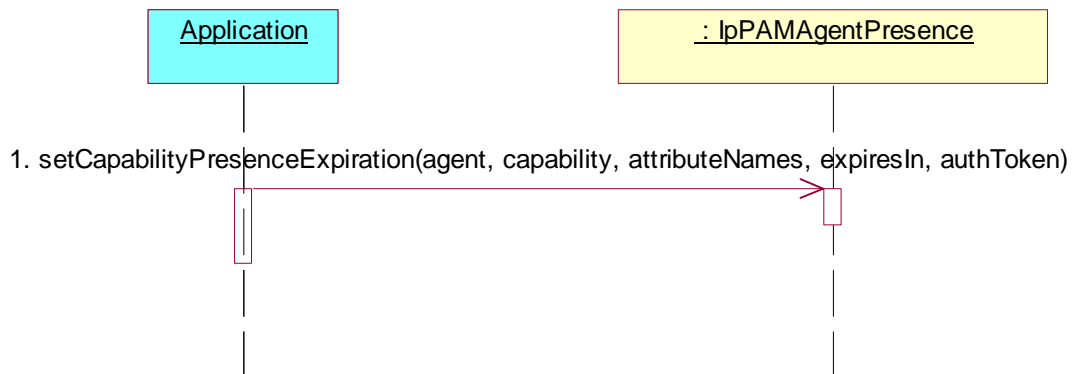
Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **setCapabilityPresenceExpiration()**

Parameters: agent, capability, attributeNames, expiresIn, authToken as obtained in Preamble

Check: no exception returned

**Test PAM\_AS\_15**

Summary: **IpPAMAgentPresence**, getAgentPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.4.5.

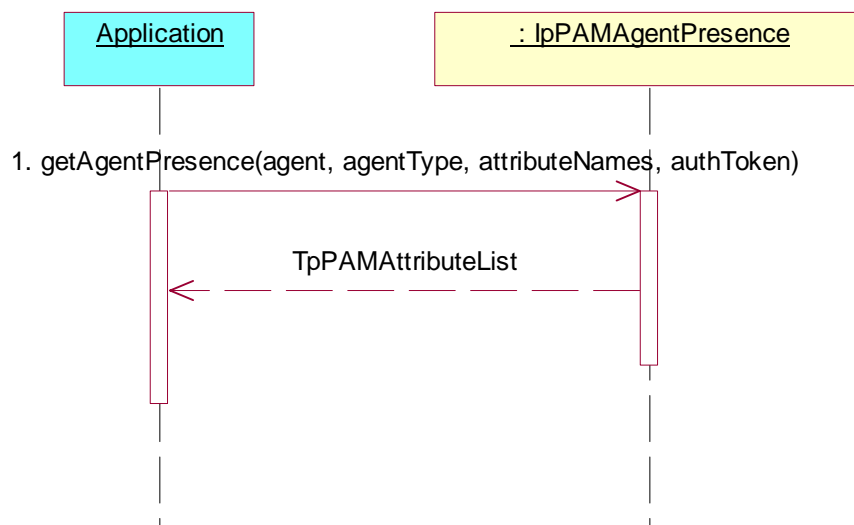
Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **getAgentPresence()**

Parameters: agent, agentType, attributeNames, authToken as obtained in Preamble

Check: valid value of TpPAMAttributeList is returned





**Test PAM\_AS\_16**

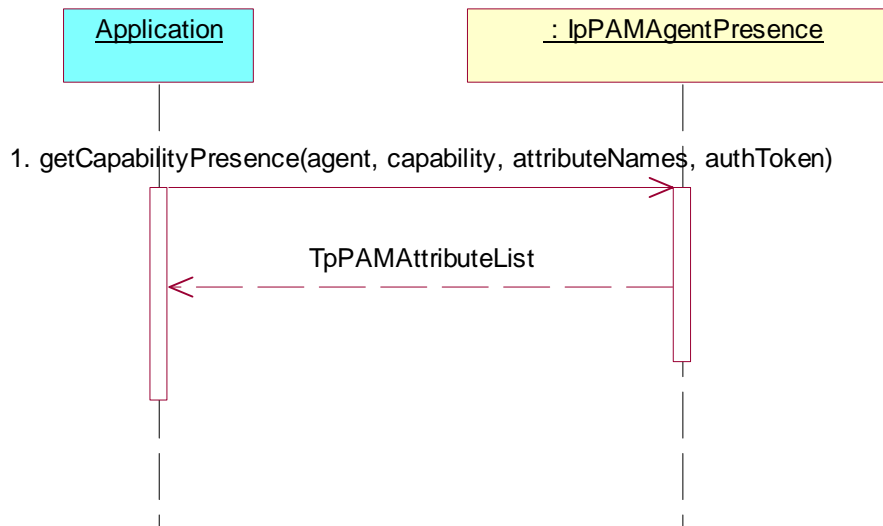
Summary: **IpPAMAgentPresence**, getCapabilityPresence successful.

Reference: ES 202 915-14 [1], clause 8.2.4.6.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call **getCapabilityPresence()**  
 Parameters: agent, capability, attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned



## 5.2.1.2 PAM Event Management Service

### 5.2.1.2.1 IpPAMEventManager

Precondition: IpPAMEventManager supported.

**Test PAM\_EM\_01**

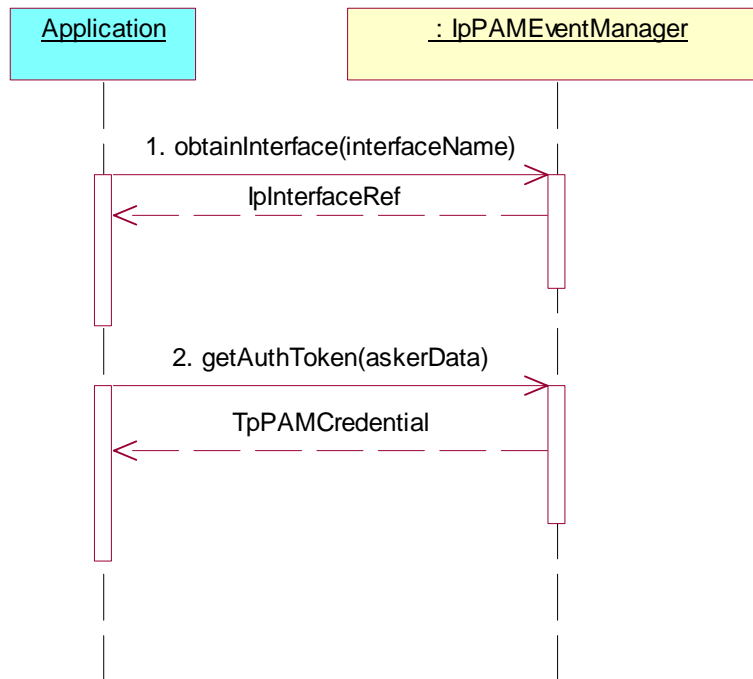
Summary: **IpPAMEventManager**, obtainInterface and getAuthToken successful.

Reference: ES 202 915-14 [1], clause 8.3.1.

Preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMEventManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call **obtainInterface()**  
 Parameters: interfaceName  
 Check: valid value of IpInterfaceRef is returned
2. Method call **getAuthToken()**  
 Parameters: askerData  
 Check: valid value of TpPAMCredential is returned



### Preamble\_getAuthToken\_EM

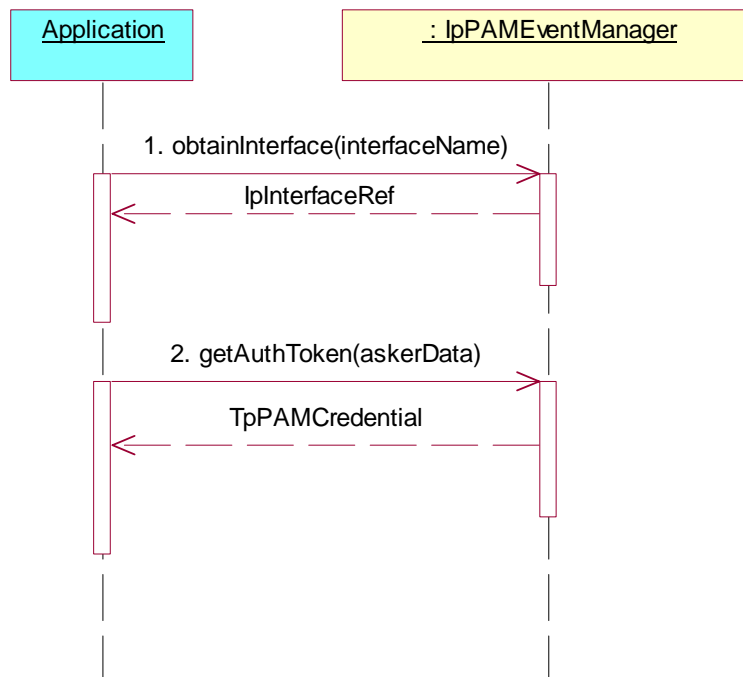
Summary: Preamble to obtain the authentication token.

Reference: ES 202 915-14 [1], clause 8.3.1.

Pre-preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMEventManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call **obtainInterface()**  
 Parameters: interfaceName  
 Check: valid value of IpInterfaceRef is returned
2. Method call **getAuthToken()**  
 Parameters: askerData  
 Check: valid value of TpPAMCredential is returned



### Test PAM\_EM\_02

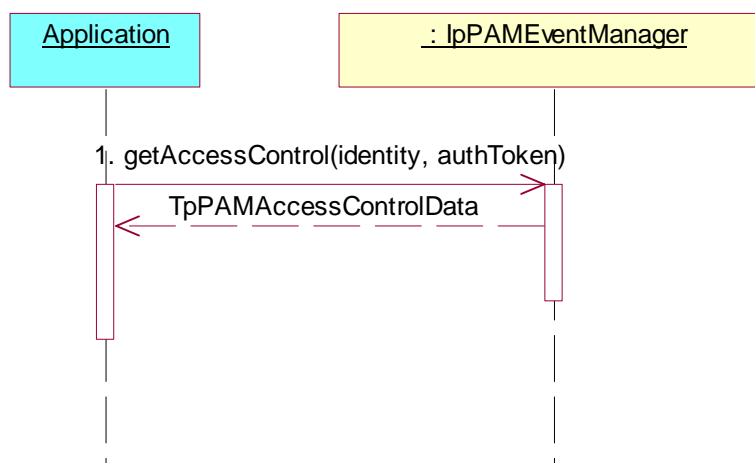
Summary: **IpPAMEventManager**, getAccessControl successful.

Reference: ES 202 915-14 [1], clause 8.3.1.3.

Preamble: **Preamble\_getAuthToken\_EM**.

Test Sequence:

1. Method call **getAccessControl()**  
 Parameters: identity, authToken as obtained in Preamble  
 Check: valid value of TpPAMAccessControlData is returned



**Test PAM\_EM\_03**

Summary: **IpPAMEventManager**, setAccessControl successful.

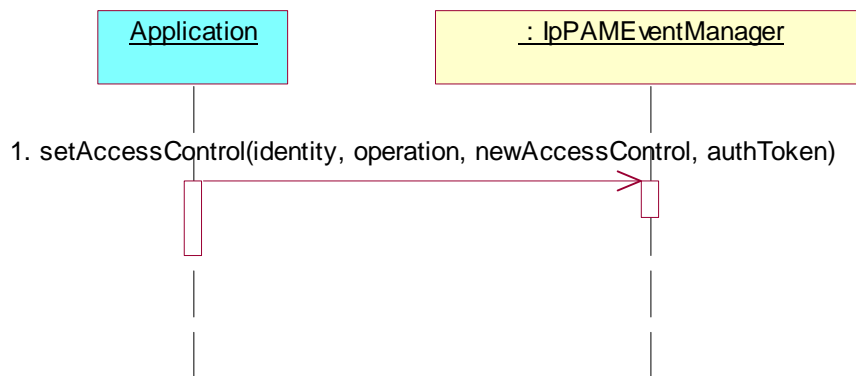
Reference: ES 202 915-14 [1], clause 8.3.1.4.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **setAccessControl()**  
 Parameters: identity, operation, newAccessControl, authToken as obtained in Preamble  
 Check: no exception returned

NOTE: setAccessControl() can be used in conjunction with getAccessControl().

**5.2.1.2.2 IpPAMEventHandler**

Precondition: IpPAMEventHandler supported.

**Test PAM\_EM\_04**

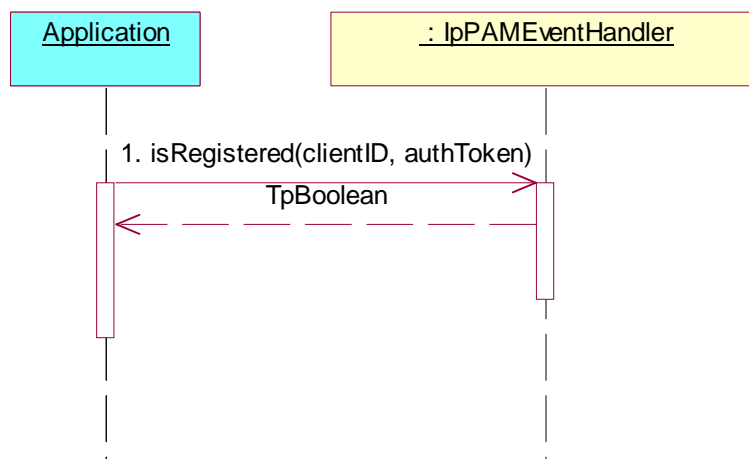
Summary: **IpPAMEventHandler**, isRegistered successful.

Reference: ES 202 915-14 [1], clause 8.3.2.1.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **isRegistered()**  
 Parameters: clientID, authToken as obtained in Preamble  
 Check: valid value of TpBoolean is returned



**Test PAM\_EM\_05**

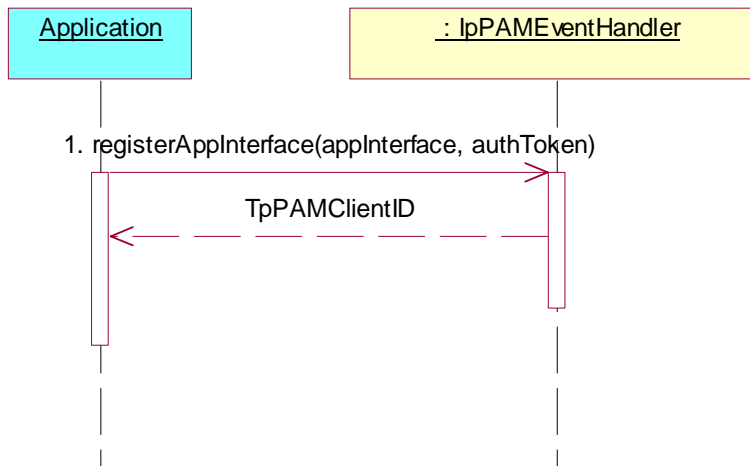
Summary: **IpPAMEventHandler**, regAppInterface successful.

Reference: ES 202 915-14 [1], clause 8.3.2.2.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: appInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned

**Test PAM\_EM\_06**

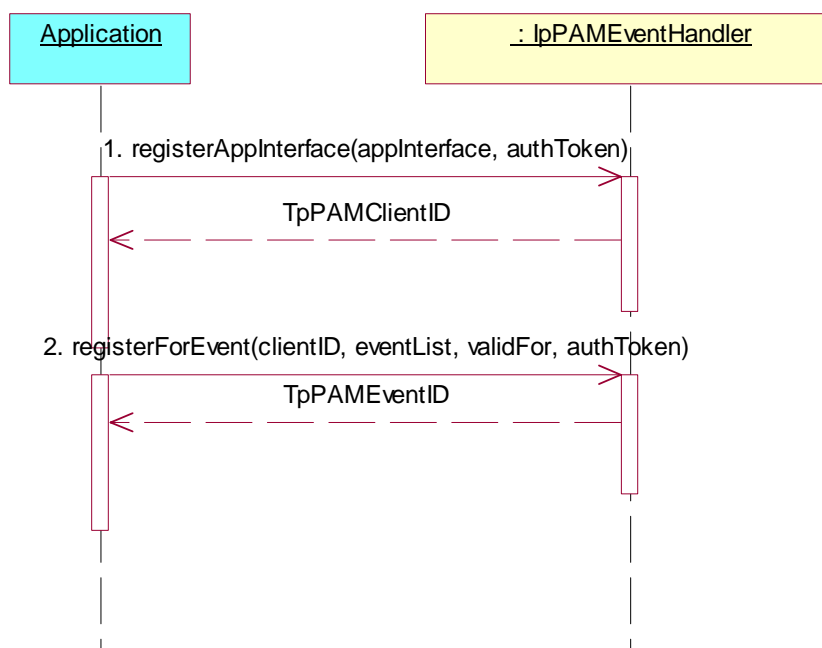
Summary: **IpPAMEventHandler**, registerForEvent successful.

Reference: ES 202 915-14 [1], clause 8.3.2.3.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: appInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned
2. Method call **registerForEvent()**  
 Parameters: clientID as returned in 1., eventList, valid For, authToken as obtained in Preamble  
 Check: valid value of TpPAMEventID is returned



### Test PAM\_EM\_07

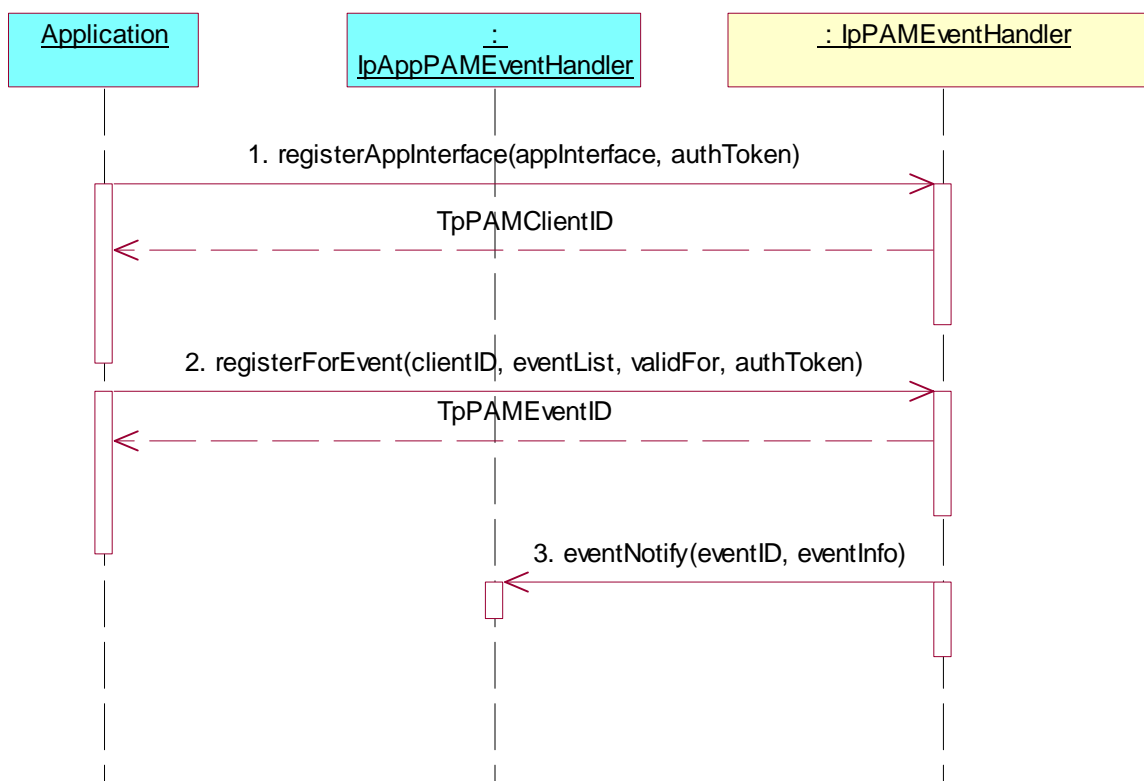
Summary: **IpPAMEventHandler**, registerForEvent and eventNotify successful.

Reference: ES 202 915-14 [1], clause 8.3.2.3.

Preamble: **Preamble\_getAuthToken\_EM**.

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: applInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned
2. Method call **registerForEvent()**  
 Parameters: clientID as returned in 1., eventList, valid For, authToken as obtained in Preamble  
 Check: valid value of TpPAMEventID is returned
3. Triggered action: cause IUT to call **eventNotify()** method on the tester's (Application) **IpAppPAMEventHandler** interface.  
 Parameters: eventID as returned in 2., eventInfo.



### Test PAM\_EM\_08

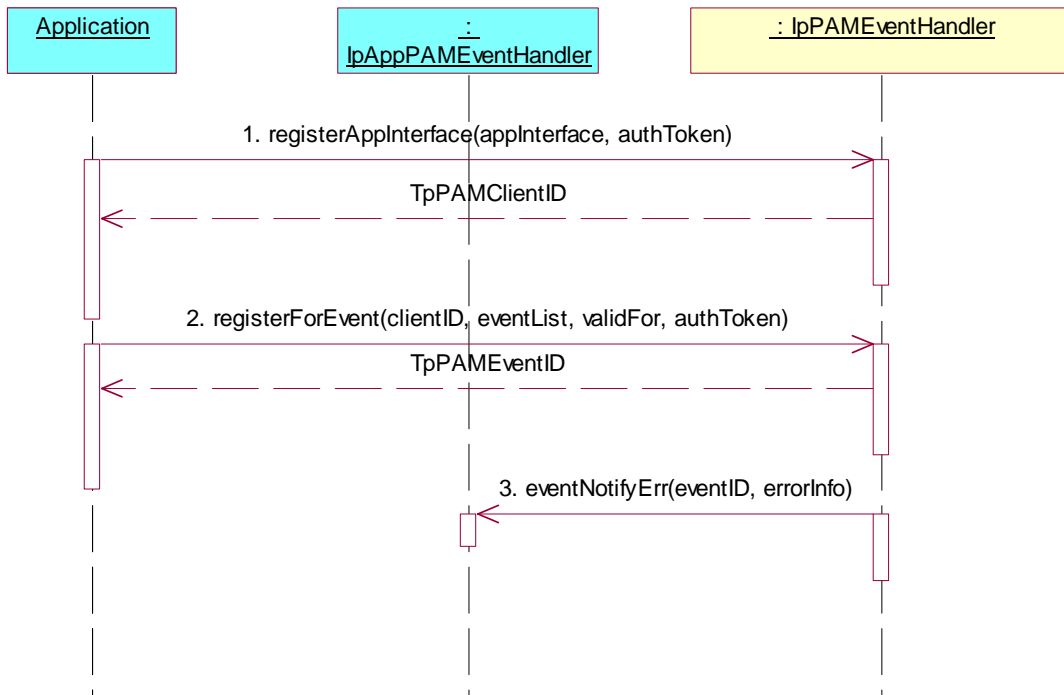
Summary: **IpPAMEventHandler**, registerForEvent and eventNotifyErr successful.

Reference: ES 202 915-14 [1], clause 8.3.2.3.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: applInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned
2. Method call **registerForEvent()**  
 Parameters: clientID as returned in 1., eventList, valid For, authToken as obtained in Preamble  
 Check: valid value of TpPAMEventID is returned
3. Triggered action: cause IUT to call **eventNotifyErr()** method on the tester's (Application) **IpAppPAMEventHandler** interface.  
 Parameters: eventID as returned in 2., errorInfo



### Test PAM\_EM\_09

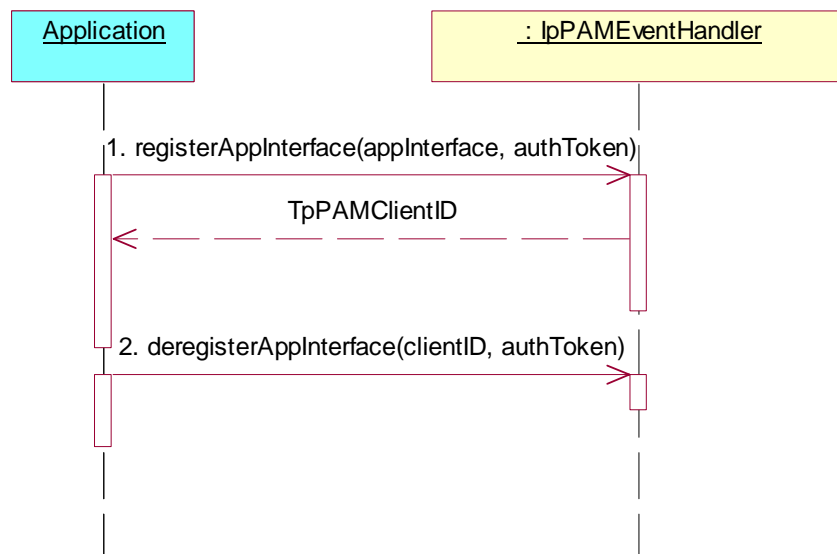
Summary: **IpPAMEventHandler**, deregisterAppInterface successful.

Reference: ES 202 915-14 [1], clause 8.3.2.2.

Preamble: **Preamble\_getAuthToken\_EM**.

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: appInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned
2. Method call **deregisterAppInterface ()**  
 Parameters: clientID as returned in 1., authToken as obtained in Preamble  
 Check: no exception returned





**Test PAM\_EM\_10**

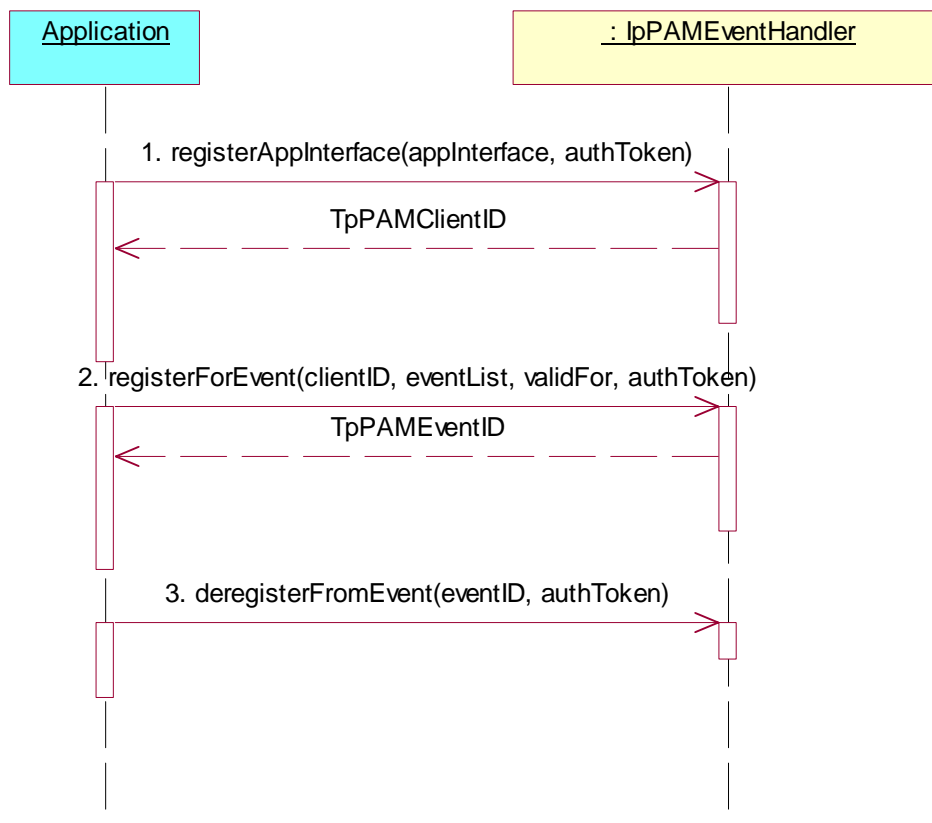
Summary: **IpPAMEventHandler**, deregisterFromEvent successful.

Reference: ES 202 915-14 [1], clause 8.3.2.3.

Preamble: **Preamble\_getAuthToken\_EM.**

Test Sequence:

1. Method call **registerAppInterface()**  
 Parameters: appInterface, authToken as obtained in Preamble  
 Check: valid value of TpPAMClientID is returned
2. Method call **registerForEvent()**  
 Parameters: clientID as returned in 1., eventList, valid For, authToken as obtained in Preamble  
 Check: valid value of TpPAMEventID is returned
3. Method call **deregisterFromEvent()**  
 Parameters: eventID as returned in 2., authToken as obtained in Preamble  
 Check: no exception returned



### 5.3.1.3 PAM Provisioning Service

#### 5.2.1.3.1 IpPAMProvisioningManager

Precondition: IpPAMProvisioningManager supported.

#### Test PAM\_PM\_01

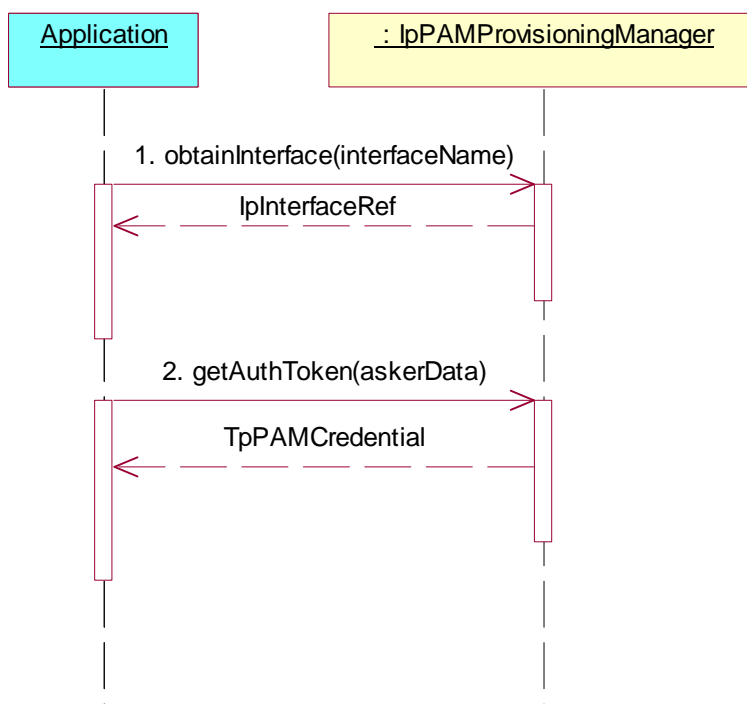
Summary: IpPAMProvisioningManager, obtainInterface and getAuthToken successful.

Reference: ES 202 915-14 [1], clause 8.1.1.

Preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMProvisioningManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call obtainInterface()
  - Parameters: interfaceName
  - Check: valid value of IpInterfaceRef is returned
2. Method call getAuthToken()
  - Parameters: askerData
  - Check: valid value of TpPAMCredential is returned



**Preamble\_getAuthToken\_PM**

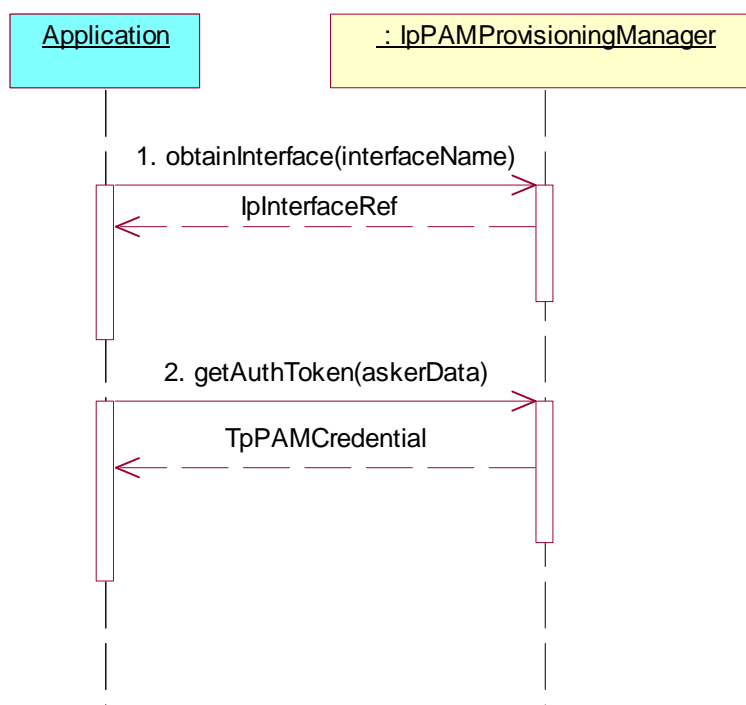
Summary: Preamble to obtain the authentication token.

Reference: ES 202 915-14 [1], clause 8.1.

Pre-preamble: Registration of the IUT (PAM SCF) and the tester (application) to the framework. The tester must have obtained a reference to an instance of the IpPAMPresenceAvailabilityManager interface through selecting that service and signing the required service agreement.

Test Sequence:

1. Method call obtainInterface()  
Parameters: interfaceName  
Check: valid value of IpInterfaceRef is returned
2. Method call getAuthToken()  
Parameters: askerData  
Check: valid value of TpPAMCredential is returned

**Test PAM\_PM\_02**

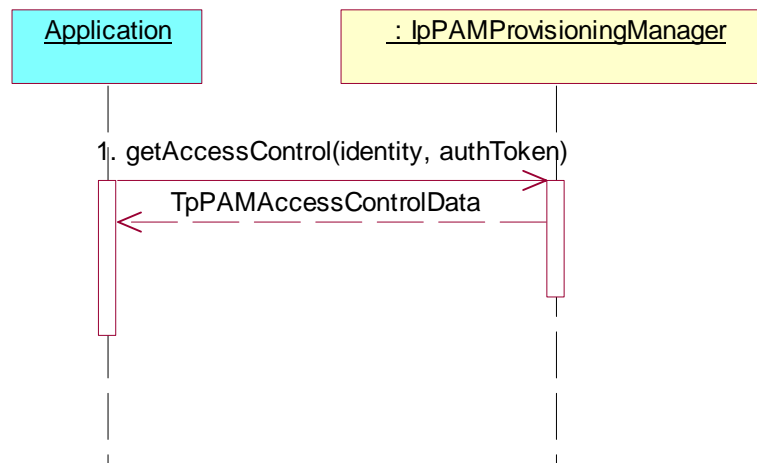
Summary: **IpPAMPresenceAvailabilityManager**, getAccessControl successful.

Reference: ES 202 915-14 [1], clause 8.1.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call getAccessControl()  
Parameters: identity, authToken as obtained in Preamble  
Check: valid value of TpPAMAccessControlData is returned



### Test PAM\_PM\_03

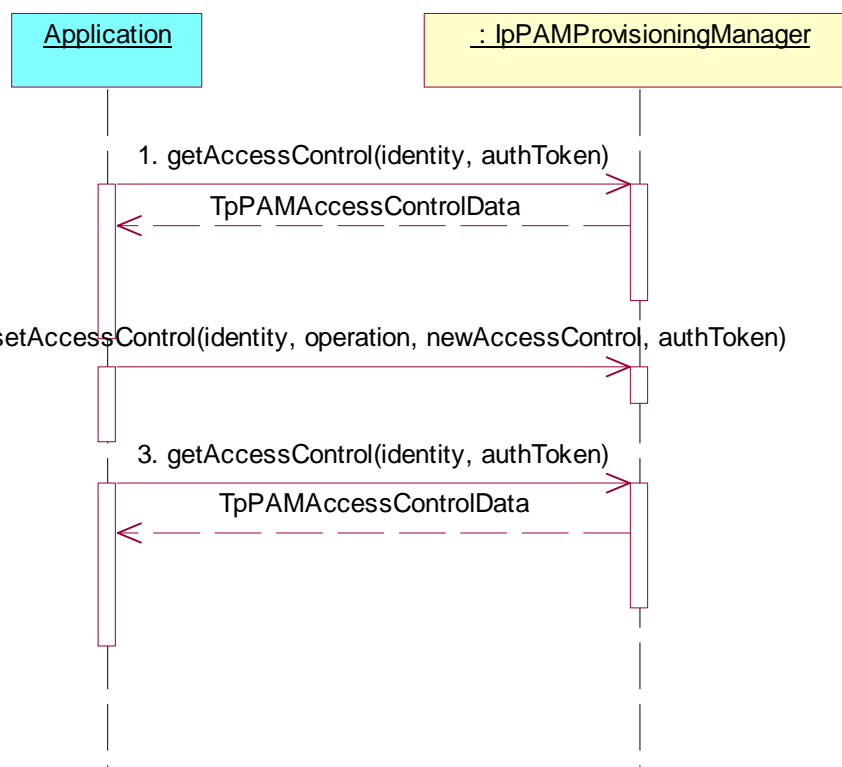
Summary: **IpPAMPresenceAvailabilityManager**, setAccessControl successful.

Reference: ES 202 915-14 [1], clause 8.1.1.

Preamble: **Preamble\_getAuthToken\_AS**.

Test Sequence:

1. Method call getAccessControl()  
 Parameters: identity, authToken as obtained in Preamble  
 Check: valid value of TpPAMAccessControlData is returned
2. Method call setAccessControl()  
 Parameters: identity, operation, newAccessControl, authToken as obtained in Preamble  
 Check: no exception is returned
3. Method call getAccessControl()  
 Parameters: identity, authToken as obtained in Preamble  
 Check: valid value of TpPAMAccessControlData is returned with modified newAccessControl in 2.



### 5.2.1.3.2 IpPAMIdentityManagement

Precondition: IpPAMIdentityManagement supported.

#### Test PAM\_PM\_04

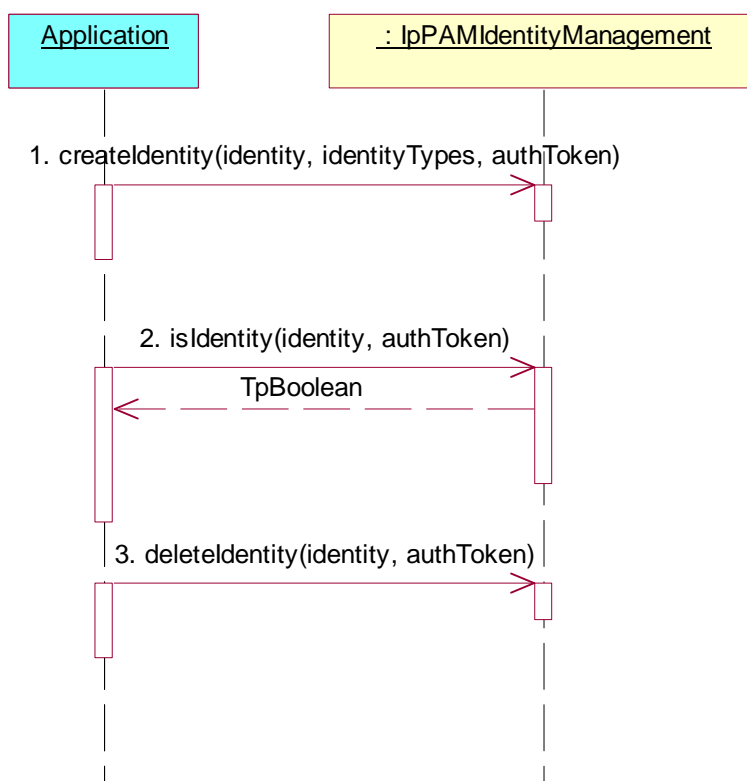
Summary: **IpPAMIdentityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **isIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: true value of TpBoolean is returned
3. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_05**

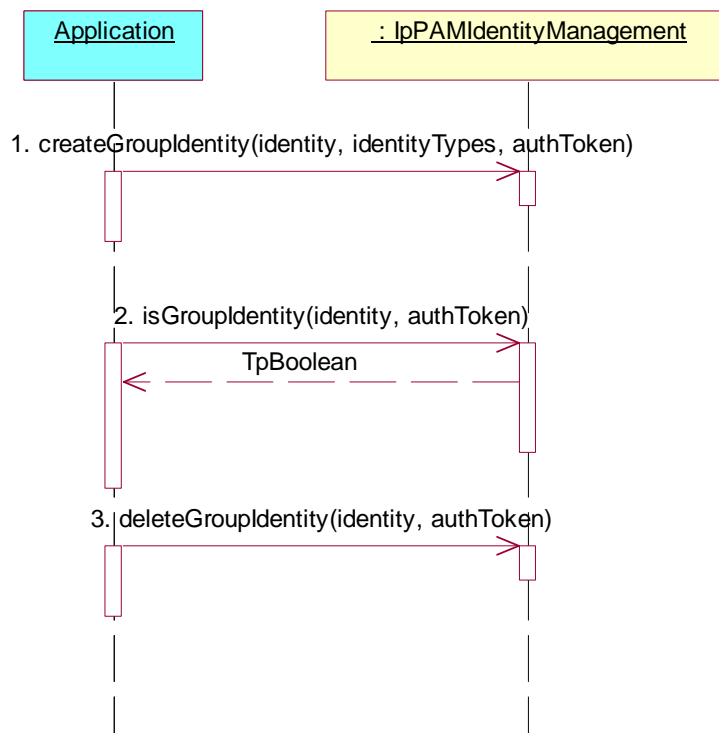
Summary: **IpPAMIdentityManagement**, isGroupIdentity successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createGroupIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **isGroupIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: true value of TpBoolean is returned
3. Method call **deleteGroupIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_06**

Summary: **IpPAMIdentityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createGroupIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **addToGroup ()**  
Parameters: group given in 2., member given in 1., authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **listMembers ()**  
Parameters: group given in 2., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList that include identity given in 1. is returned
5. Method call **listGroupMembership ()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList that include group given in 2. is returned
6. Method call **removeFromGroup ()**  
Parameters: group given in 2., member given in 1., authToken as obtained in Preamble  
Check: no exception is returned
7. Method call **deleteGroupIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned





**Test PAM\_PM\_07**

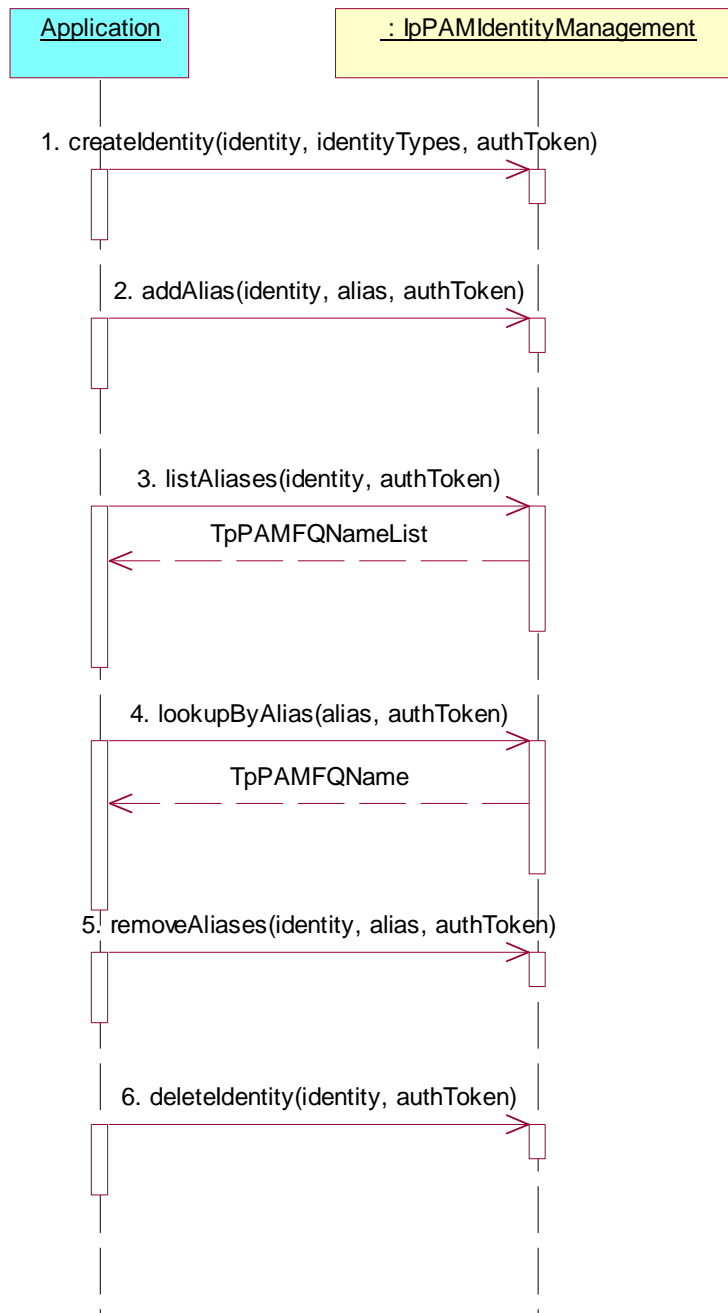
Summary: **IpPAMIdentityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **addAlias()**  
Parameters: identity given in 1., alias, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **listAliases()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList included alias given in 2. is returned
4. Method call **lookupByAliases()**  
Parameters: alias given in 2., authToken as obtained in Preamble  
Check: valid value of TpPAMFQName corresponding with identity name given in 1. is returned
5. Method call **removeAliases()**  
Parameters: identity given in 1., alias given in 2., authToken as obtained in Preamble  
Check: no exception is returned
6. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



### Test PAM\_PM\_08

Summary: **IpPAMIdentityManagement**, all methods successful.

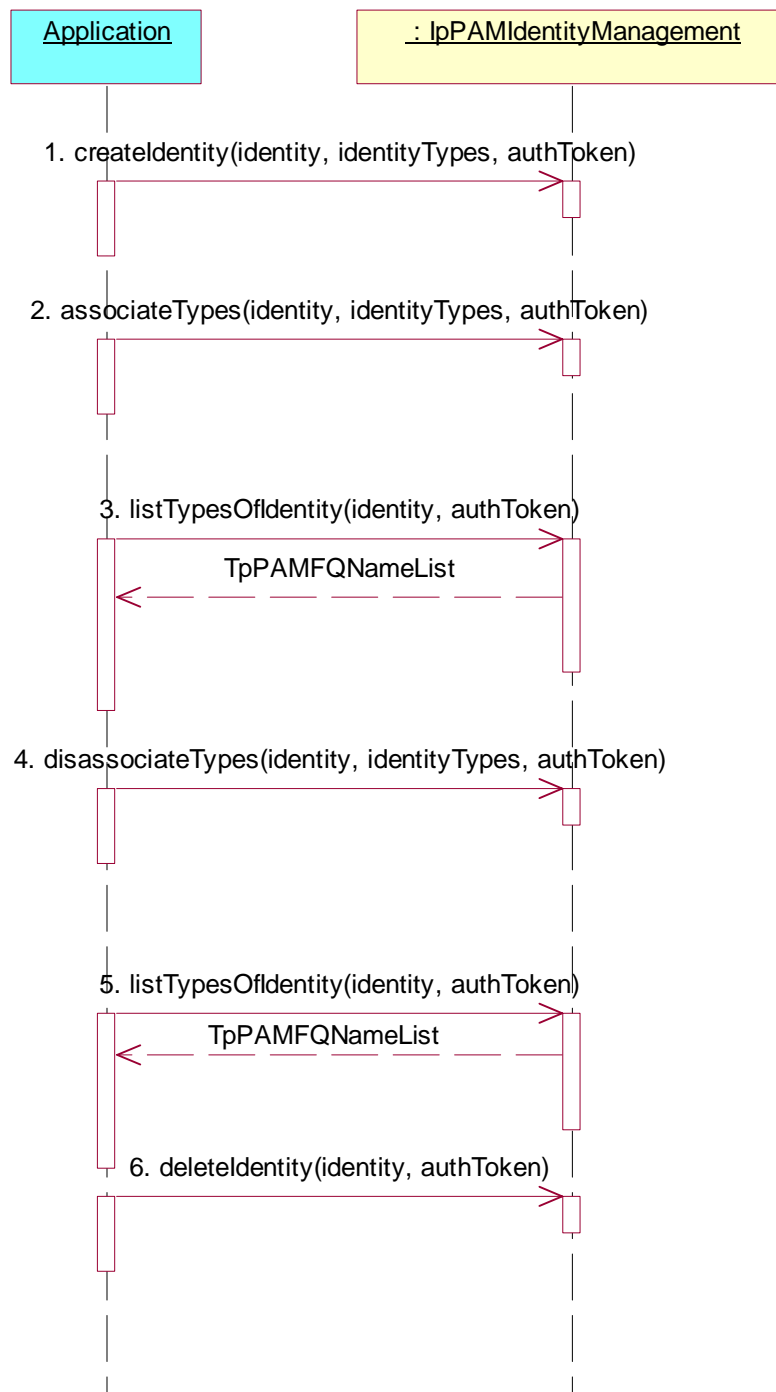
Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createIdentity()**  
 Parameters: identity, identityTypes, authToken as obtained in Preamble  
 Check: no exception is returned
2. Method call **associateTypes()**  
 Parameters: identity given in 1., identityTypes, authToken as obtained in Preamble  
 Check: no exception is returned

3. Method call **listTypesOfIdentity()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList including identityTypes given in 2. is returned
4. Method call **disassociateTypes()**  
Parameters: identity given in 1., identityTypes given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listTypesOfIdentity()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList without identityTypes given in 4. is returned
6. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_09**

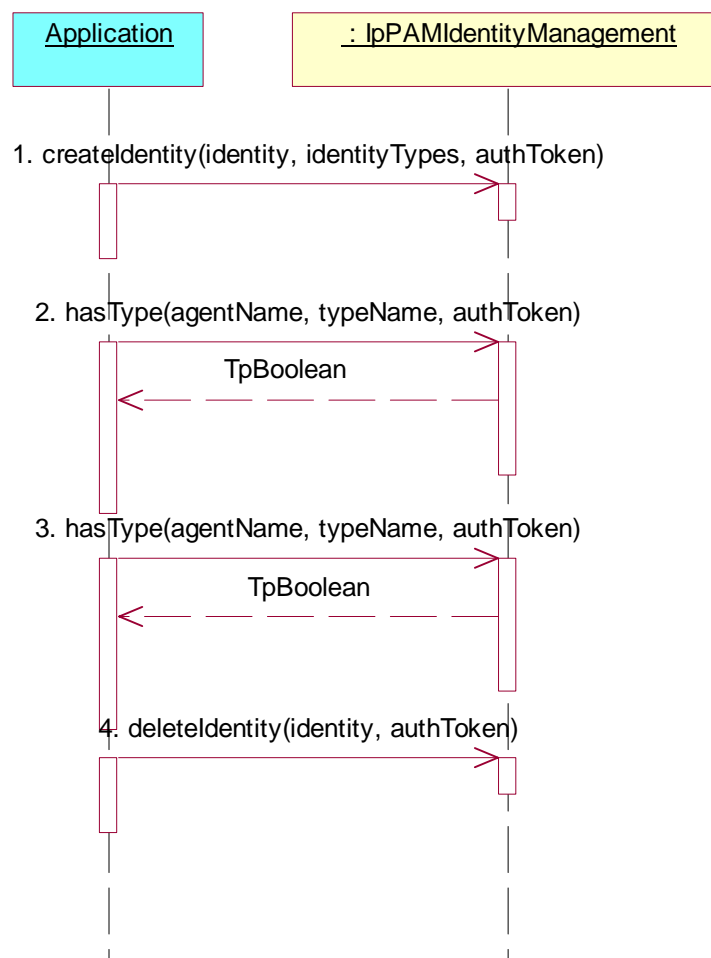
Summary: **IpPAMIdentityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **hasType()**  
Parameters: identity given in 1., identityType previous included in identityTypes given in 1., authToken as obtained in Preamble  
Check: true value of TpBoolean is returned
3. Method call **hasType()**  
Parameters: identity given in 1., identityType previous not included in identityTypes given in 1., authToken as obtained in Preamble  
Check: false value of TpBoolean is returned
4. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_10**

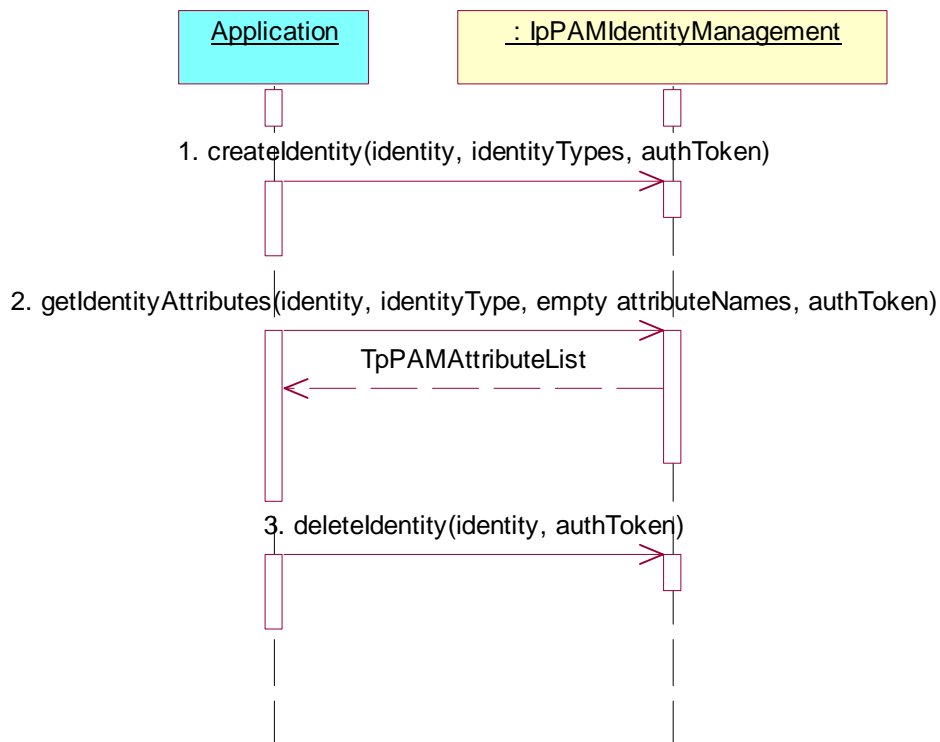
Summary: **IpPAMIdentityManagement**, getIdentityAttributes successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **getIdentityAttributes()**  
Parameters: identity given in 1., identityType previous included in identityTypes given in 1., empty list of attributeNames, authToken as obtained in Preamble  
Check: valid value of TpPAMAttributeList is returned
3. Method call **deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned

**Test PAM\_PM\_11**

Summary: **IpPAMIdentityManagement**, getIdentityAttributes successful.

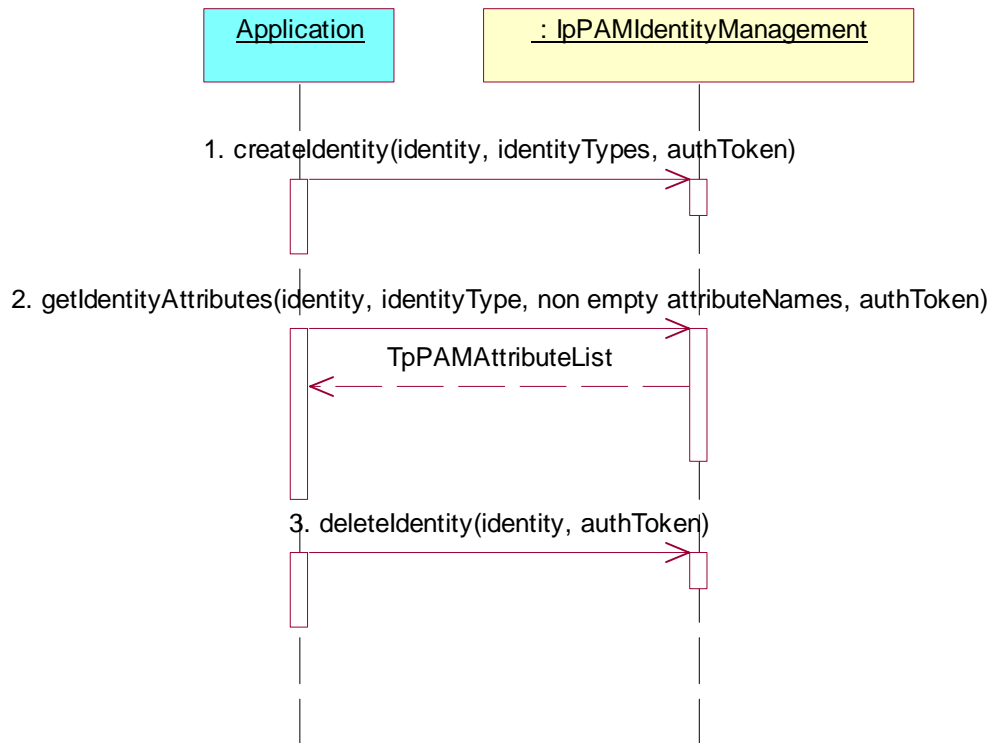
Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned

2. Method call **getIdentityAttributes()**  
 Parameters: identity given in 1., identityType previous included in identityTypes given in 1., non empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned included only attributes in attributeNames parameter
3. Method call **deleteIdentity()**  
 Parameters: same identity than given in 1., authToken as obtained in Preamble  
 Check: no exception is returned



### Test PAM\_PM\_12

Summary: **IpPAMIdentityManagement**, setIdentityAttributes successful.

Reference: ES 202 915-14 [1], clause 8.1.2.

Preamble: **Preamble\_getAuthToken\_PM**.

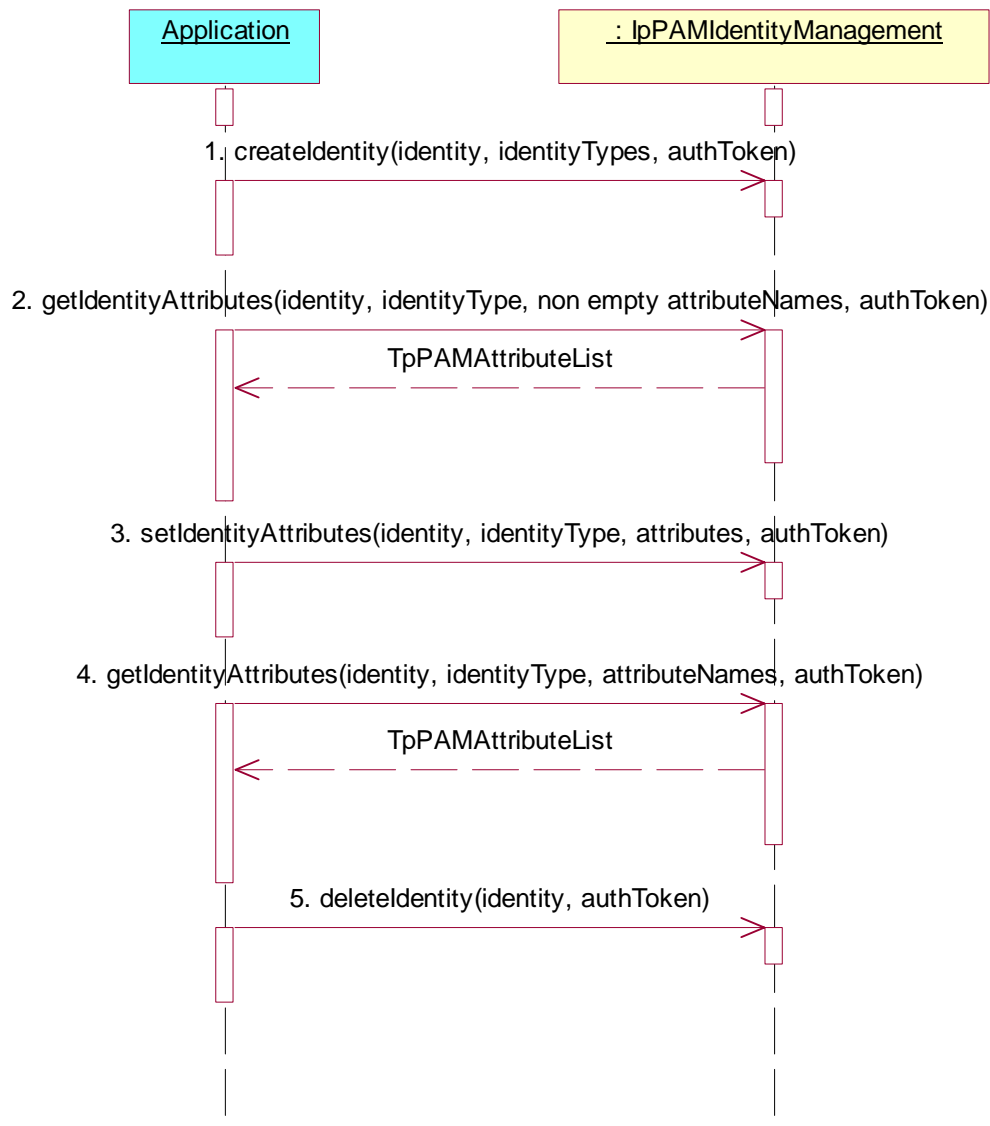
Test Sequence:

1. Method call **createIdentity()**  
 Parameters: identity, identityTypes, authToken as obtained in Preamble  
 Check: no exception is returned
2. Method call **getIdentityAttributes()**  
 Parameters: identity given in 1., identityType previous included in identityTypes given in 1., empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned
3. Method call **setIdentityAttributes()**  
 Parameters: identity given in 1., identityType previous included in identityTypes given in 1., attributes with different values of TpPAMAttributeList returned in 2., authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned
4. Method call **getIdentityAttributes()**  
 Parameters: identity given in 1., identityType previous included in identityTypes given in 1., empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned included attributes and values given in 3.

5. Method call **deleteIdentity()**

Parameters: same identity than given in 1., authToken as obtained in Preamble

Check: no exception is returned



## 5.2.1.3.3 IpPAMAgentManagement

Precondition: IpPAMAgentManagement supported.

**Test PAM\_PM\_13**Summary: **IpPAMAgentManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM.**

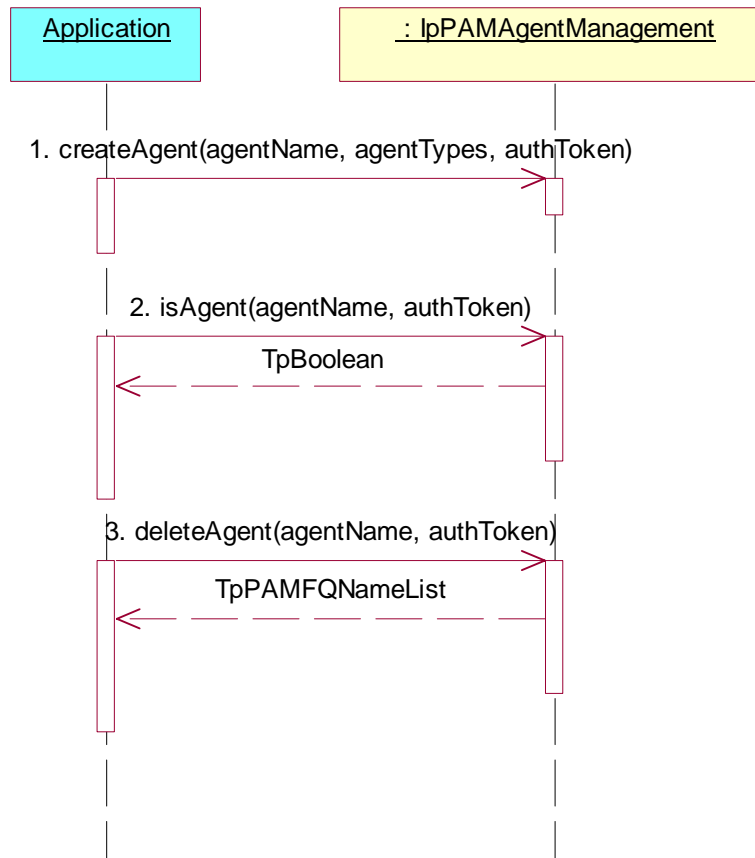
Test Sequence:

1. Method call **createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **isAgent ()**  
Parameters: same agentName than given in 1., authToken as obtained in Preamble  
Check: true value of TpBoolean is returned

3. Method call **deleteAgent()**

Parameters: same agentName than given in 1., authToken as obtained in Preamble

Check: no exception is returned

**Test PAM\_PM\_14**Summary: **IpPAMAgentManagement**, disableCapabilities successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgent()**

Parameters: agentName, agentTypes, authToken as obtained in Preamble

Check: no exception is returned

2. Method call **enableCapabilities()**

Parameters: agentName given in 1., capabilities, authToken as obtained in Preamble

Check: no exception is returned

3. Method call **listEnabledCapabilities()**

Parameters: agentName given in 1., authToken as obtained in Preamble

Check: valid value of TpPAMCapabilityList is returned

4. Method call **listAllCapabilities()**

Parameters: agentName given in 1., authToken as obtained in Preamble

Check: valid value of TpPAMCapabilityList is returned

5. Method call **disableCapabilities()**

Parameters: agentName given in 1., capabilities given in 2., authToken as obtained in Preamble

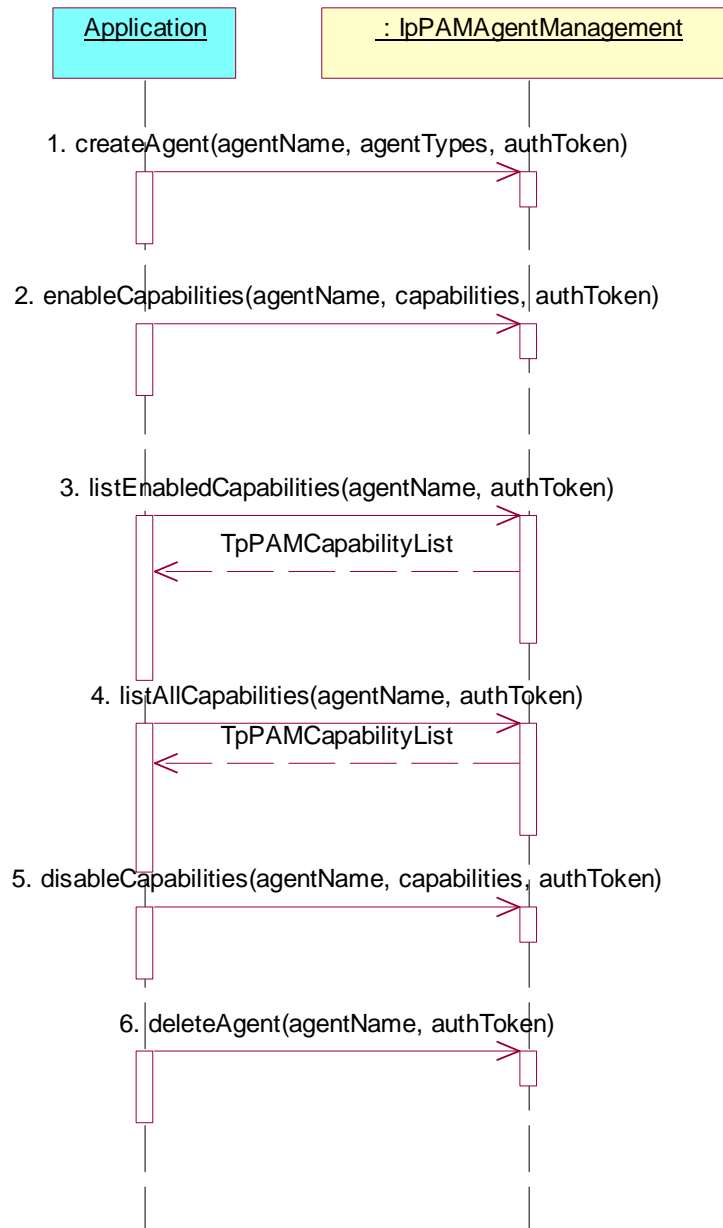
Check: no exception is returned



6. Method call **deleteAgent()**

Parameters: same agentName than given in 1., authToken as obtained in Preamble

Check: no exception is returned

**Test PAM\_PM\_15**Summary: **IpPAMAgentManagement**, disassociateTypes successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgent()**

Parameters: agentName, agentTypes, authToken as obtained in Preamble

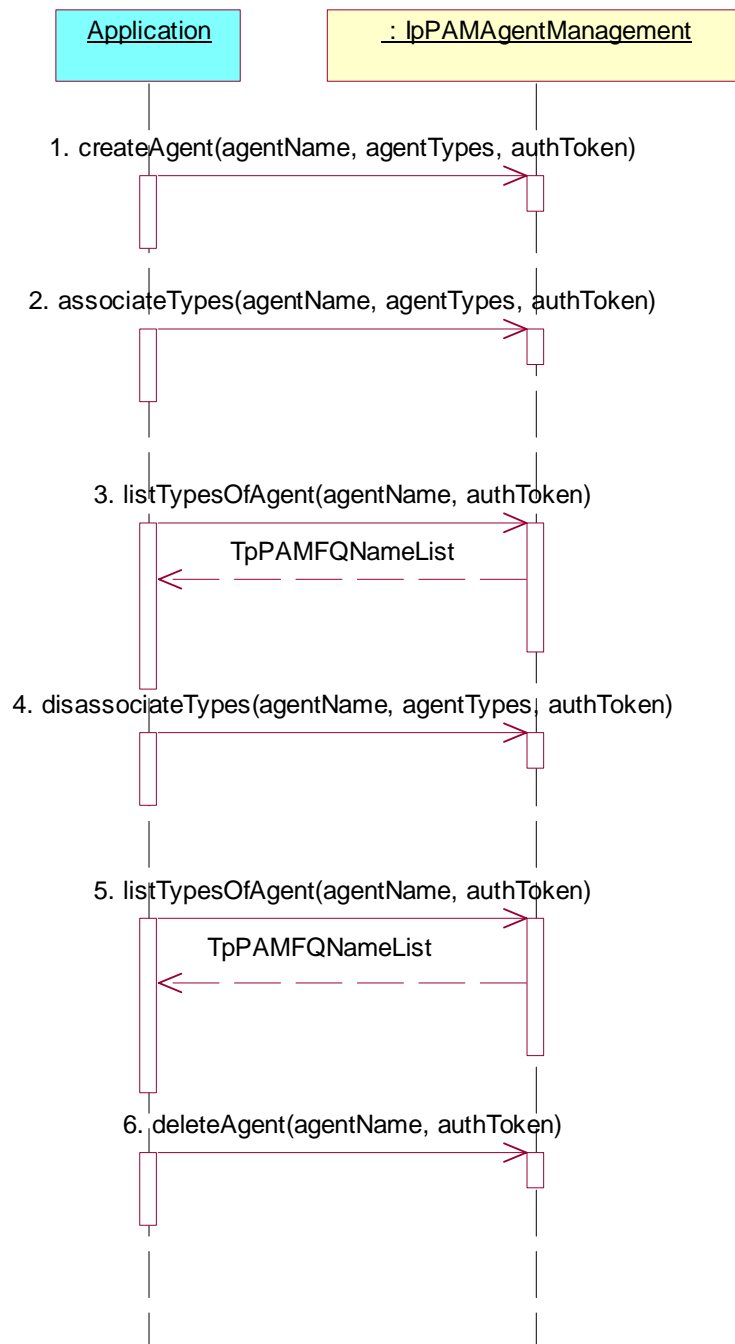
Check: no exception is returned

2. Method call **associateTypes()**

Parameters: agentName given in 1., agentTypes, authToken as obtained in Preamble

Check: no exception is returned

3. Method call **listTypesOfAgent()**  
Parameters: agentName given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList including agentTypes given in 2. is returned
4. Method call **disassociateTypes()**  
Parameters: agentName given in 1., agentTypes given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listTypesOfAgent()**  
Parameters: agentName given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList not including agentTypes given in 2. is returned
6. Method call **deleteAgent()**  
Parameters: same agentName than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_16**

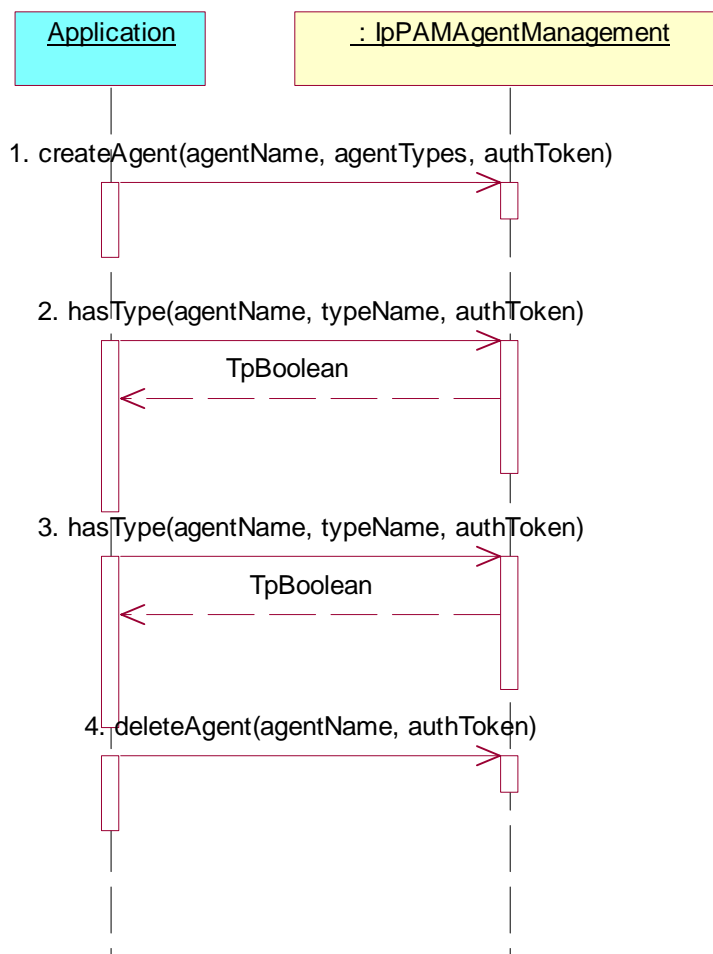
Summary: **IpPAMAgentManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **hasType()**  
Parameters: agentName given in 1., agentType previously included in agentTypes given in 1., authToken as obtained in Preamble  
Check: true value of TpBoolean is returned
3. Method call **hasType()**  
Parameters: agentName given in 1., agentType previously not included in agentTypes given in 1., authToken as obtained in Preamble  
Check: false value of TpBoolean is returned
4. Method call **deleteAgent()**  
Parameters: same agentName than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_17**

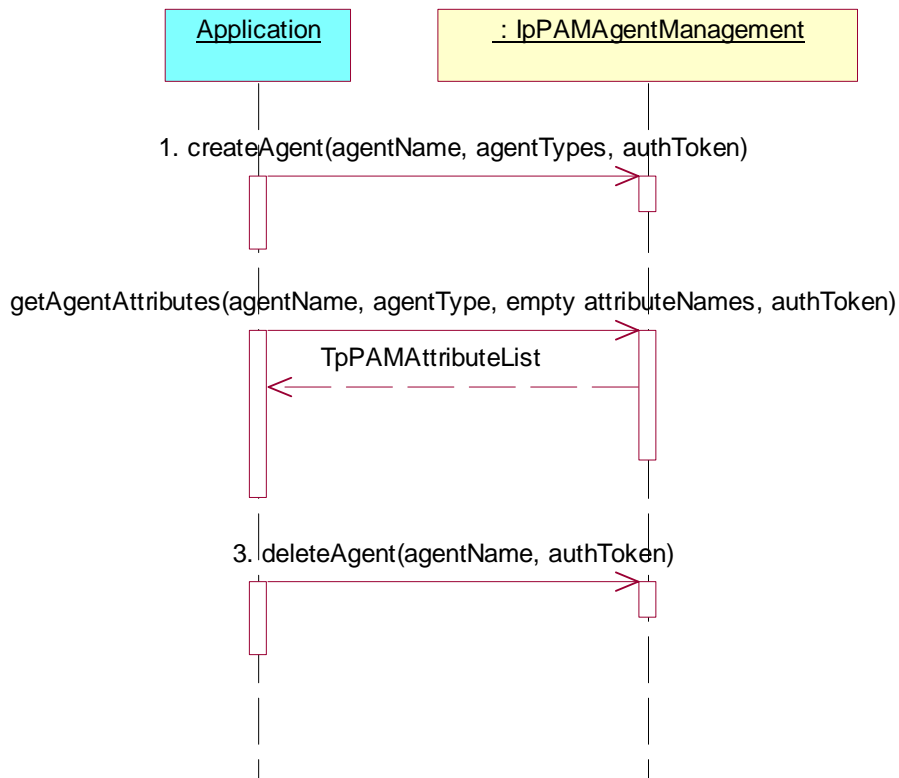
Summary: **IpPAMAgentManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **getAgentAttributes()**  
Parameters: agentName given in 1., agentType previously included in agentTypes given in 1., empty list of attributeNames, authToken as obtained in Preamble  
Check: valid value of TpPAMAttributeList is returned
2. Method call **deleteAgent()**  
Parameters: same agentName than given in 1., authToken as obtained in Preamble  
Check: no exception is returned

**Test PAM\_PM\_18**

Summary: **IpPAMAgentManagement**, getAgentAttributes successful.

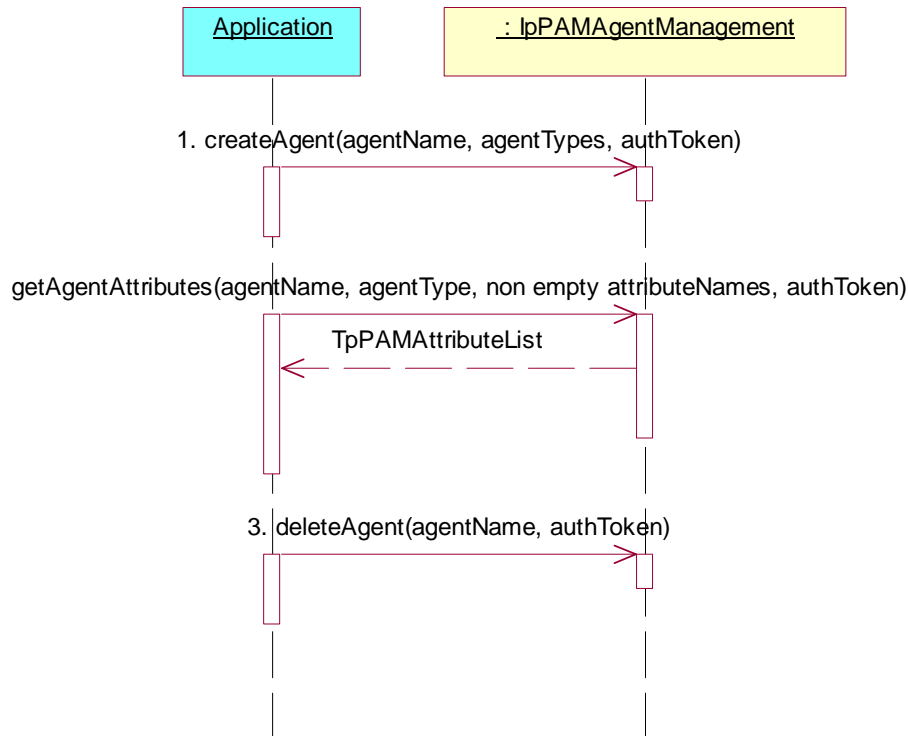
Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned

2. Method call **getAgentAttributes()**  
 Parameters: agent given in 1., agentType previous included in agentTypes given in 1., non empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned included only attributes in attributeNames parameter
3. Method call **deleteAgent()**  
 Parameters: same agentName than given in 1., authToken as obtained in Preamble  
 Check: no exception is returned



### Test PAM\_PM\_19

Summary: **IpPAMAgentManagement**, setAgentAttributes successful.

Reference: ES 202 915-14 [1], clause 8.1.3.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createAgent()**  
 Parameters: agentName, agentTypes, authToken as obtained in Preamble  
 Check: no exception is returned
2. Method call **getAgentAttributes()**  
 Parameters: agent given in 1., agentType previous included in agentTypes given in 1., non empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned included only attributes in attributeNames parameter
3. Method call **setAgentAttributes()**  
 Parameters: agentName given in 1., agentType previous included in agentTypes given in 1., attributes with different values of TpPAMAttributeList returned in 2., authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned

4. Method call **getAgentAttributes()**  
 Parameters: agent given in 1., agentType previous included in agentTypes given in 1., non empty list of attributeNames, authToken as obtained in Preamble  
 Check: valid value of TpPAMAttributeList is returned included attributes and values given in 3.
5. Method call **deleteAgent()**  
 Parameters: same agentName than given in 1., authToken as obtained in Preamble  
 Check: no exception is returned



#### 5.2.1.3.4 IpPAMAgentAssignment

Precondition: IpPAMAgentAssignment supported.

##### Test PAM\_PM\_20

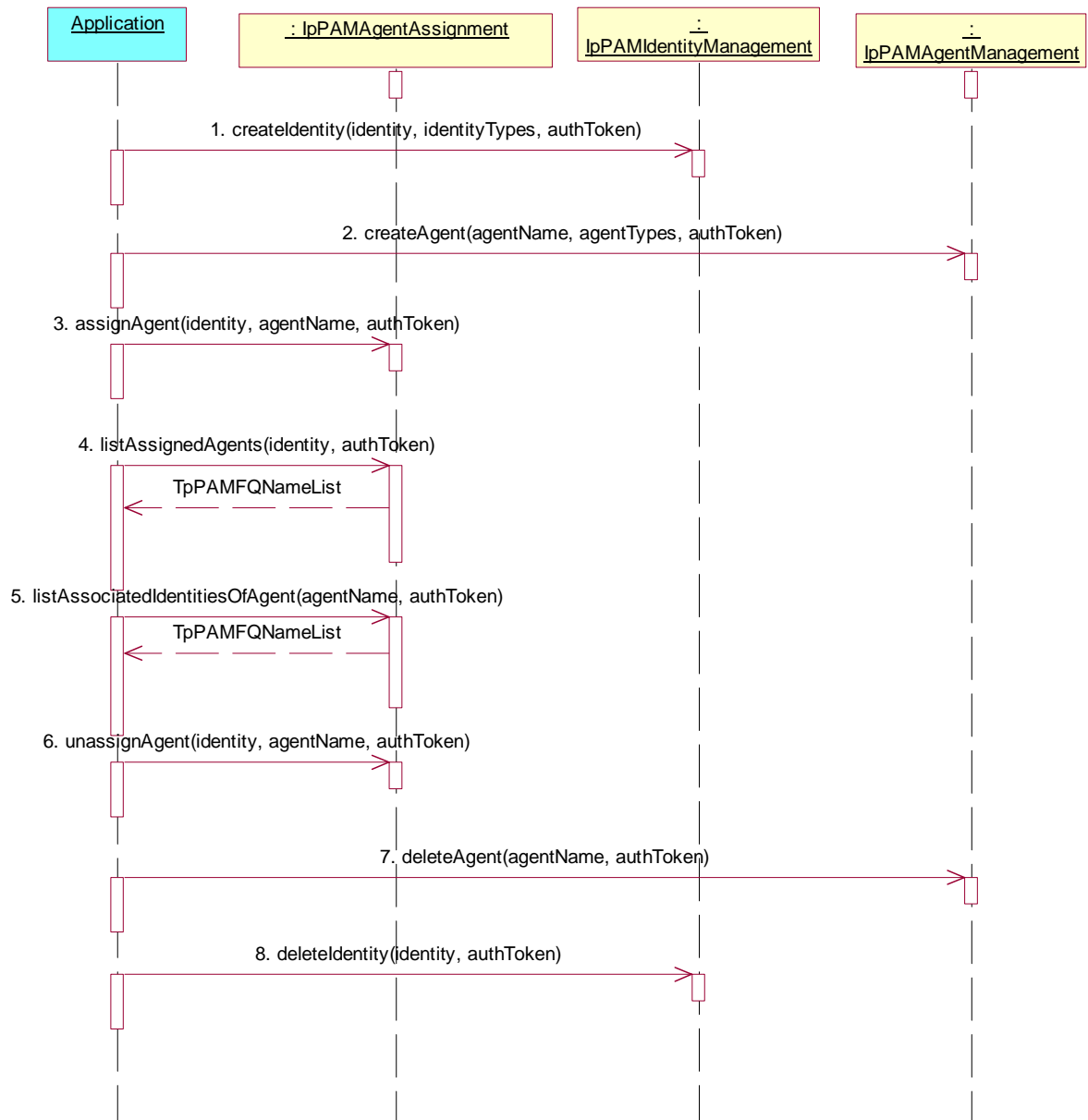
Summary: **IpPAMAgentAssignment**, listAssignAgent successful.

Reference: ES 202 915-14 [1], clause 8.1.4.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **IpPAMIdentityManagement.createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **IpPAMAgentManagement.createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **assignAgent()**  
Parameters: identity given in 1., agentName,given in 2., authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **listAssignAgents()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList included agentName given in 2.
5. Method call **listAssociatedIdentitiesOfAgent()**  
Parameters: agentName given in 2., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList included identity given in 1.
6. Method call **unassignAgent()**  
Parameters: identity given in 1., agentName,given in 2., authToken as obtained in Preamble  
Check: no exception is returned
7. Method call **IpPAMAgentManagement.deleteAgent()**  
Parameters: same agentName than given in 2., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **IpPAMIdentityManagement.deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned





**Test PAM\_PM\_21**

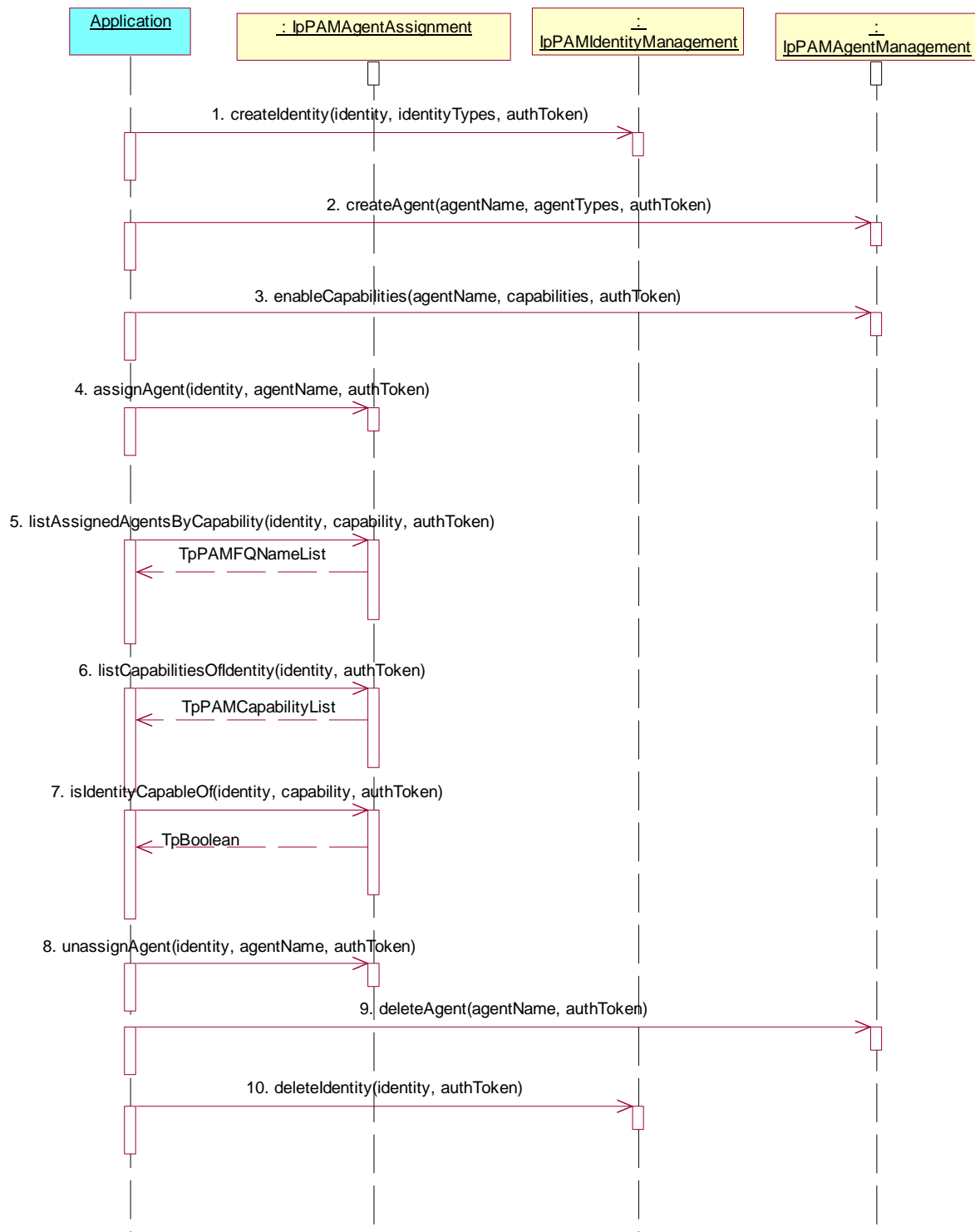
Summary: **IpPAMAgentAssignment**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.4.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **IpPAMIdentityManagement.createIdentity()**  
Parameters: identity, identityTypes, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **IpPAMAgentManagement.createAgent()**  
Parameters: agentName, agentTypes, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **IpPAMAgentManagement.enableCapabilities()**  
Parameters: agentName given in 2., capabilities, authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **assignAgent()**  
Parameters: identity given in 1., agentName,given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listAssignedAgentsByCapability()**  
Parameters: identity given in 1., capability included capabilities given in 3., authToken as obtained in Preamble  
Check: valid value of TpPAMFQNameList included agentName given in 2.
6. Method call **listCapabilitiesOfIdentity()**  
Parameters: identity given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMCapabilityList included capabilities given in 3.
7. Method call **isIdentityCapableOf()**  
Parameters: identity given in 1., one of a capability given in 3, authToken as obtained in Preamble  
Check: true is returned
8. Method call **unassignAgent()**  
Parameters: identity given in 1., agentName,given in 2., authToken as obtained in Preamble  
Check: no exception is returned
9. Method call **IpPAMAgentManagement.deleteAgent()**  
Parameters: same agentName than given in 1., authToken as obtained in Preamble  
Check: no exception is returned
10. Method call **IpPAMIdentityManagement.deleteIdentity()**  
Parameters: same identity than given in 1., authToken as obtained in Preamble  
Check: no exception is returned



### 5.2.1.3.5 IpPAMIdentityTypeManagement

Precondition: IpPAMIdentityTypeManagement supported.

#### Test PAM\_PM\_22

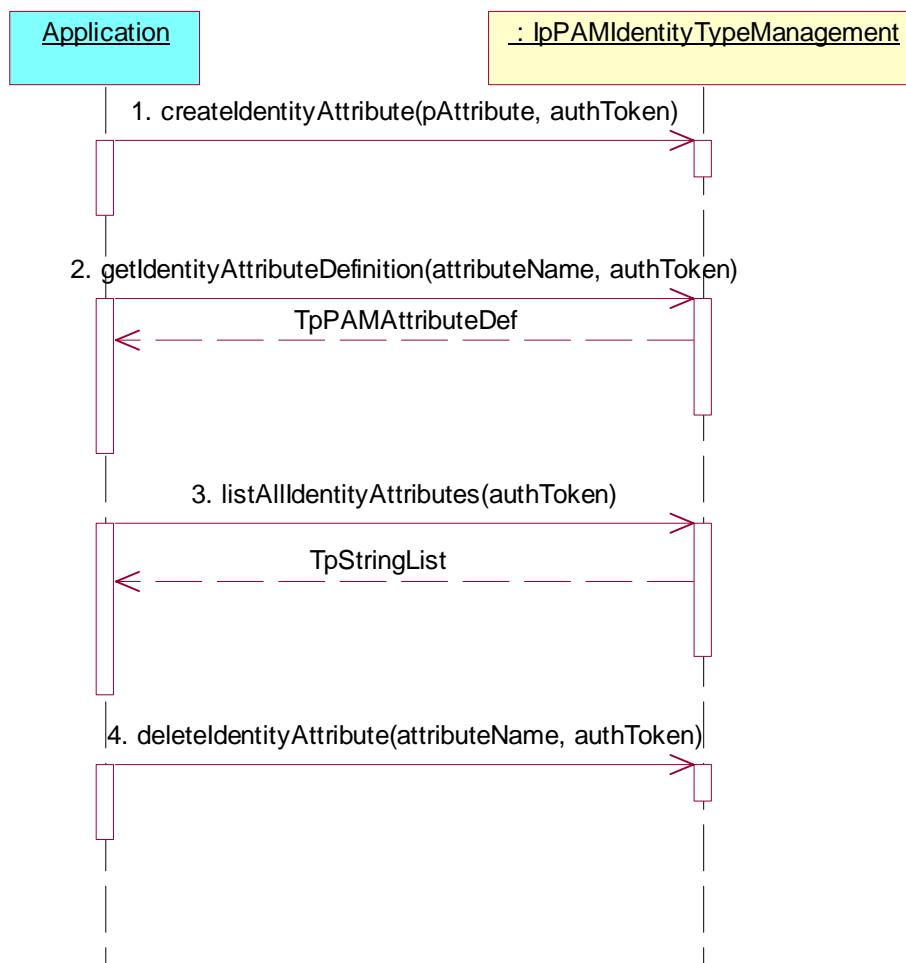
Summary: **IpPAMIdentityTypeManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.5.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createIdentityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **getIdentityAttributeDefinition()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMAttributeDef is returned
3. Method call **listAllIdentityAttributes()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned with AttributeName given in 1.
4. Method call **deleteIdentityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned



### Test PAM\_PM\_23

Summary: **IpPAMIdentityTypeManagement**, all methods successful.

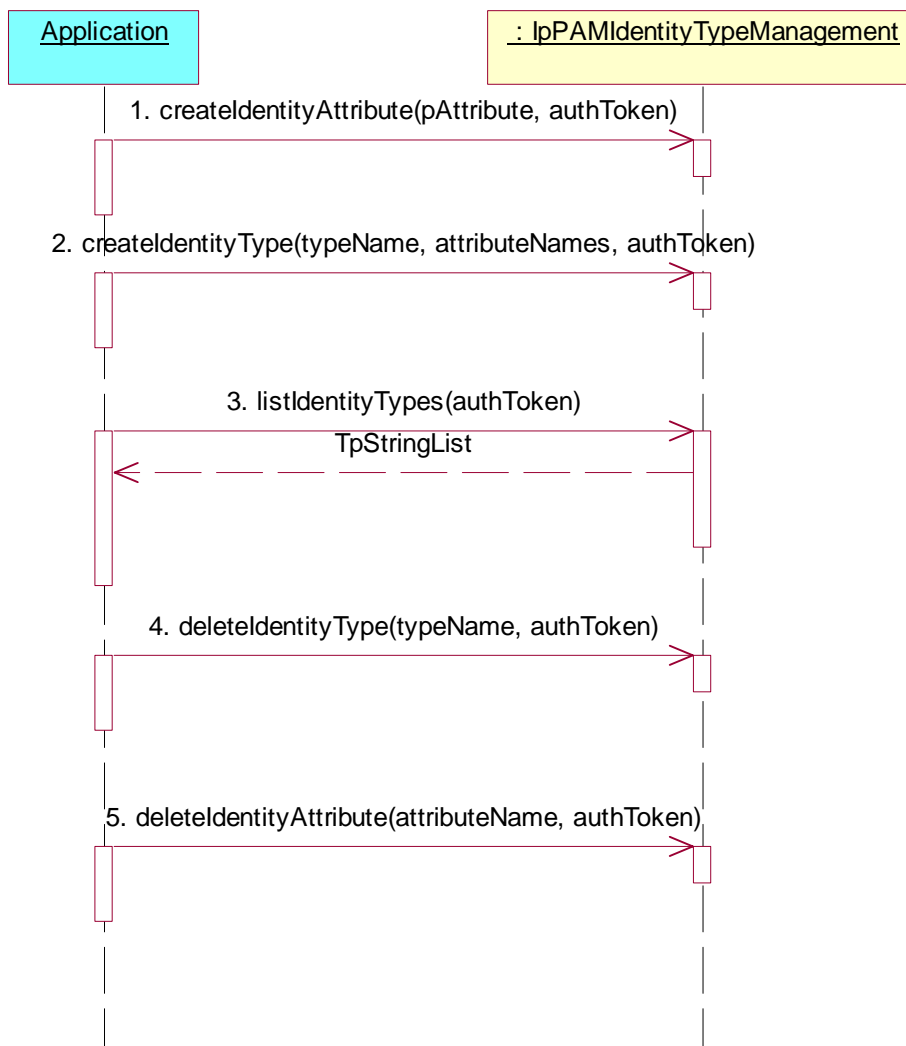
Reference: ES 202 915-14 [1], clause 8.1.5.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned

2. Method call **createIdentityType()**  
Parameters: typeName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **listIdentityTypes()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned included typeName given in 2.
4. Method call **deleteIdentityType()**  
Parameters: typeName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **deleteIdentityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_24**

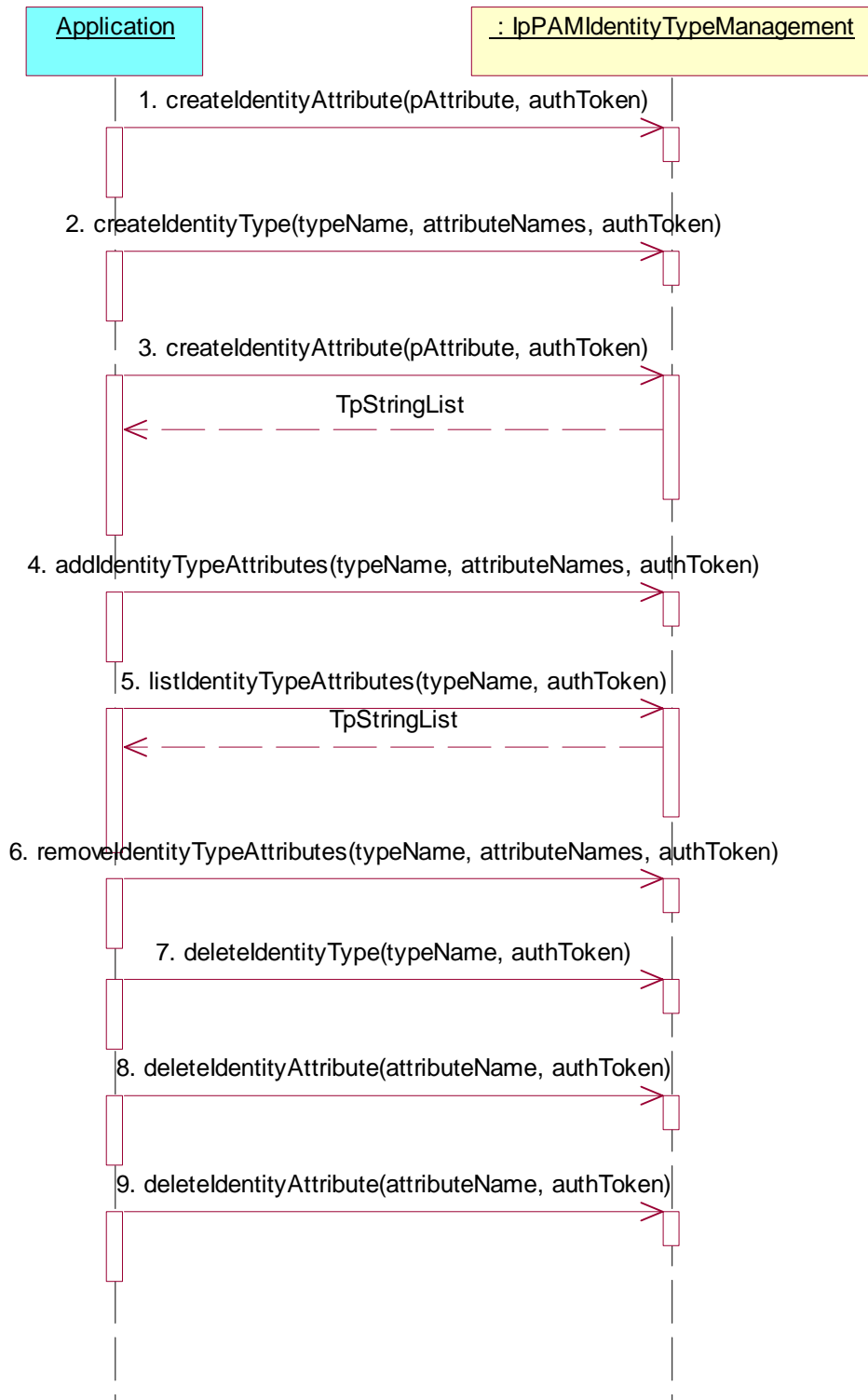
Summary: **IpPAMIdentityTypeManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.5.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createIdentityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createIdentityType()**  
Parameters: typeName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **createIdentityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **addIdentityTypeAttributes()**  
Parameters: typeName given in 1., attributesNames included attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listIdentityTypeAttributes()**  
Parameters: typeName given in 1., authToken as obtained in Preamble  
Check: valid value of TpStringList is returned
6. Method call **removeIdentityTypeAttributes()**  
Parameters: typeName given in 1., attributesNames given in 4., authToken as obtained in Preamble  
Check: no exception is returned
7. Method call **deleteIdentityType()**  
Parameters: typeName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **deleteIdentityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned
9. Method call **deleteIdentityAttribute()**  
Parameters: attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned



### 5.2.1.3.6 IpPAMAgentTypeManagement

Precondition: IpPAMAgentTypeManagement supported.

#### Test PAM\_PM\_25

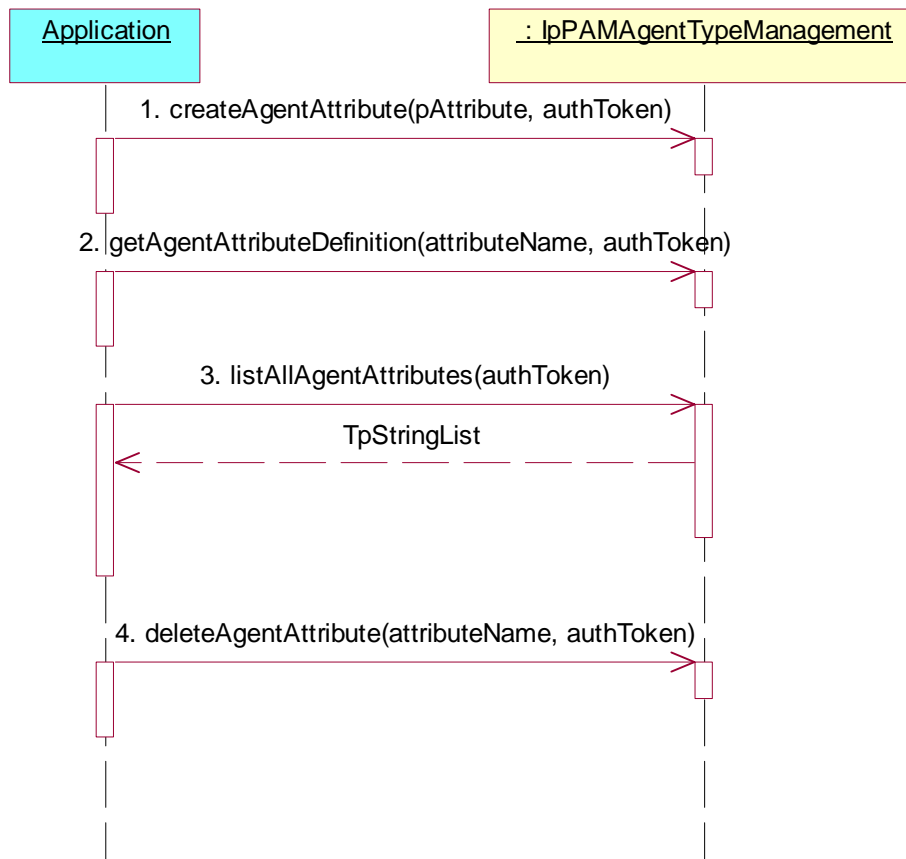
Summary: **IpPAMAgentTypeManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.6.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgentAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **getAgentAttributeDefinition()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMAttributeDef is returned
3. Method call **listAllAgentAttributes()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned with AttributeName given in 1.
4. Method call **deleteAgentAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_26**

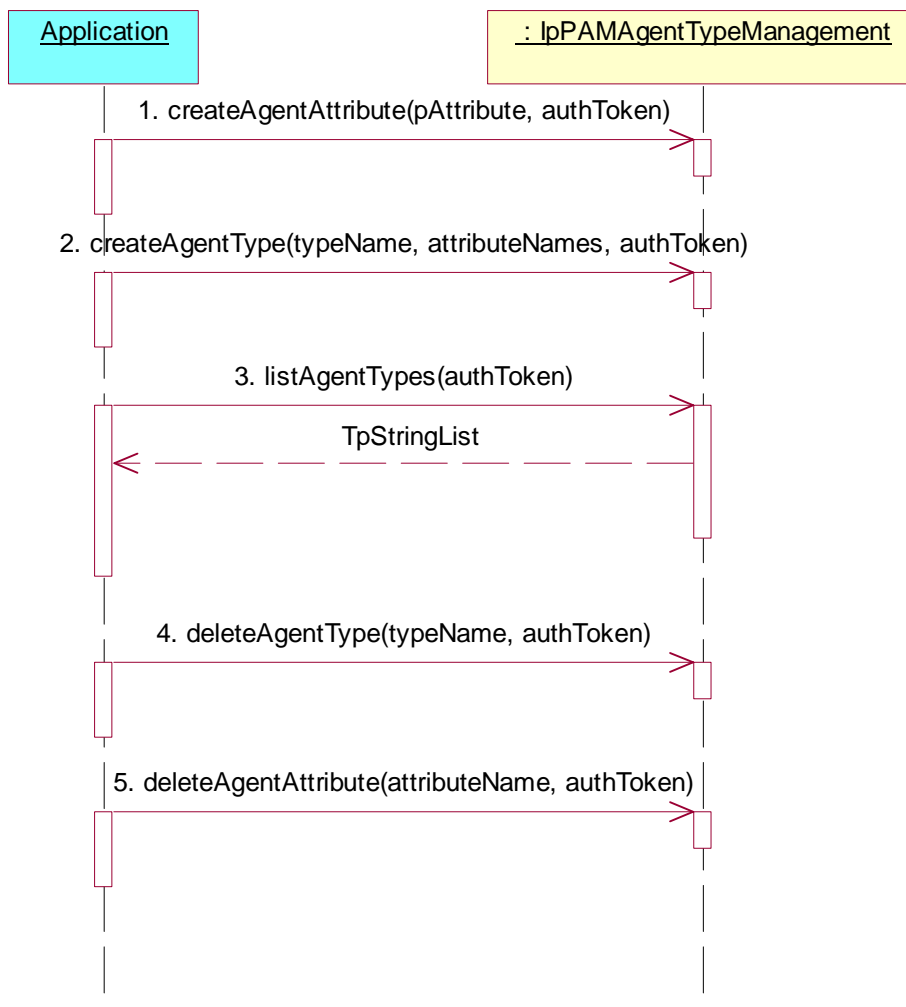
Summary: **IpPAMAgentTypeManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.6.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgentAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createAgentType()**  
Parameters: typeName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **listAgentTypes()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned included typeName given in 2.
4. Method call **deleteAgentType()**  
Parameters: typeName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **deleteAgentAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned





**Test PAM\_PM\_27**

Summary: **IpPAMAgentTypeManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.6.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createAgentAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createAgentType()**  
Parameters: typeName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **createAgentAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **addAgentTypeAttributes()**  
Parameters: typeName given in 1., attributesNames included attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listAgentTypeAttributes()**  
Parameters: typeName given in 1., authToken as obtained in Preamble  
Check: valid value of TpStringList is returned
6. Method call **removeAgentTypeAttributes()**  
Parameters: typeName given in 1., attributesNames given in 4., authToken as obtained in Preamble  
Check: no exception is returned
7. Method call **deleteAgentType()**  
Parameters: typeName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **deleteAgentAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned
9. Method call **deleteAgentAttribute()**  
Parameters: attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned



### 5.2.1.3.7 IpPAMCapabilityManagement

Precondition: IpPAMCapabilityManagement supported.

#### Test PAM\_PM\_28

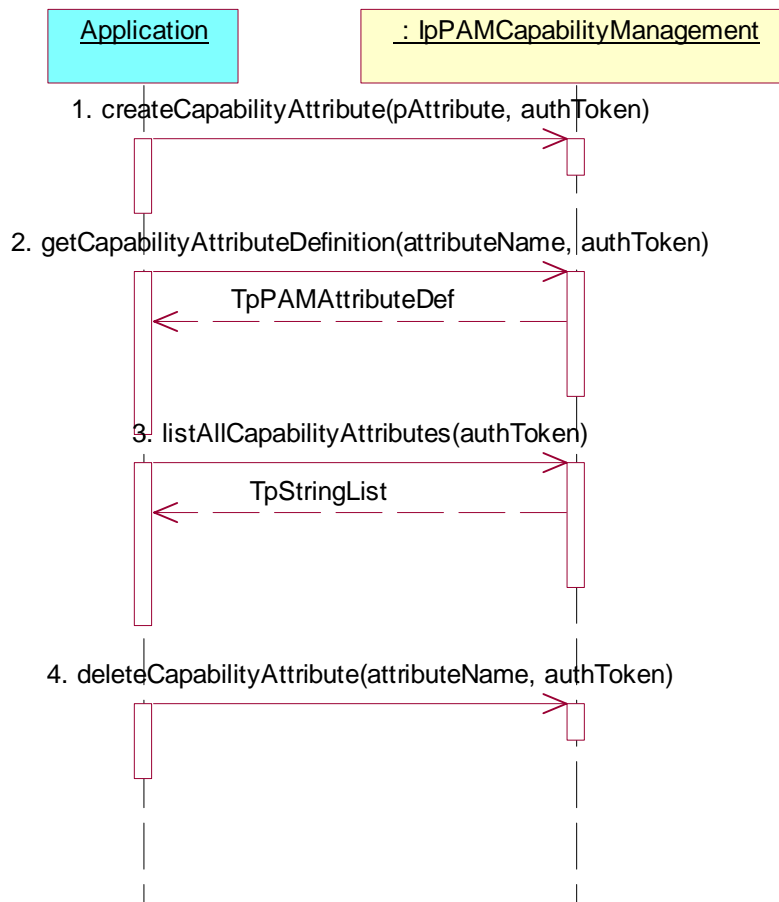
Summary: **IpPAMCapabilityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.7.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createCapabilityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **getCapabilityAttributeDefinition()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: valid value of TpPAMAttributeDef is returned
3. Method call **listAllCapabilityAttributes()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned with AttributeName given in 1.
4. Method call **deleteCapabilityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_29**

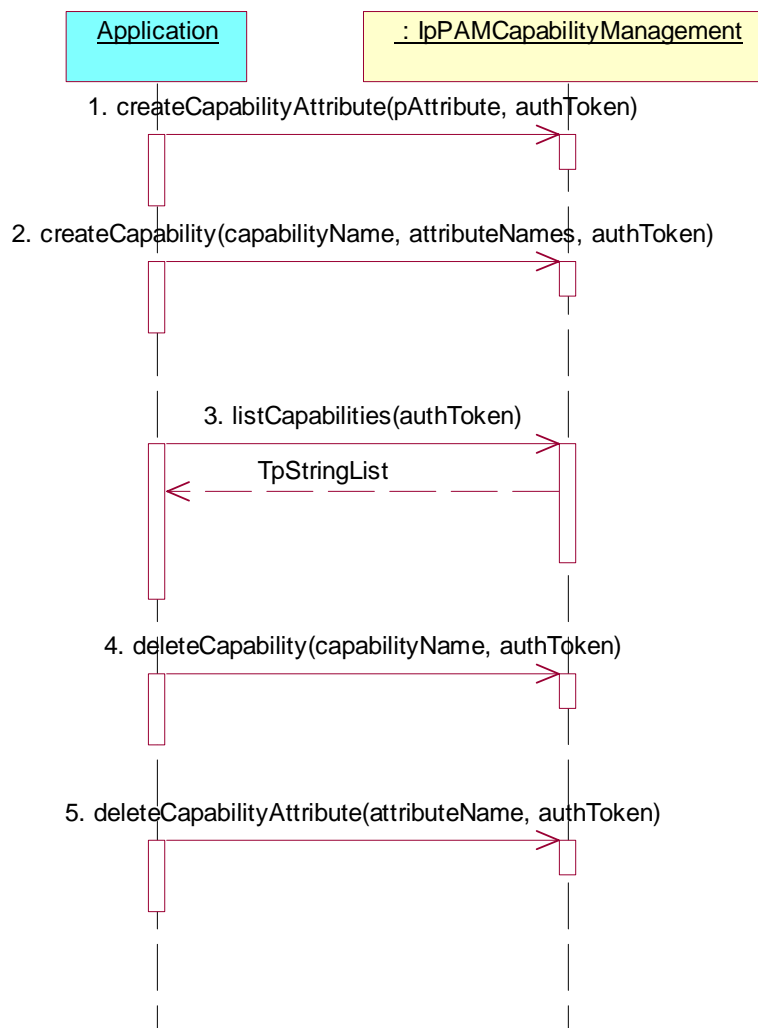
Summary: **IpPAMCapabilityManagement** all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.7.

Preamble: **Preamble\_getAuthToken\_PM.**

Test Sequence:

1. Method call **createCapabilityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createCapability()**  
Parameters: capabilityName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **listCapabilities()**  
Parameters: authToken as obtained in Preamble  
Check: valid value of TpStringList is returned included tCapabilityName given in 2.
4. Method call **deleteCapability()**  
Parameters: capabilityName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **deleteCapabilityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_30**

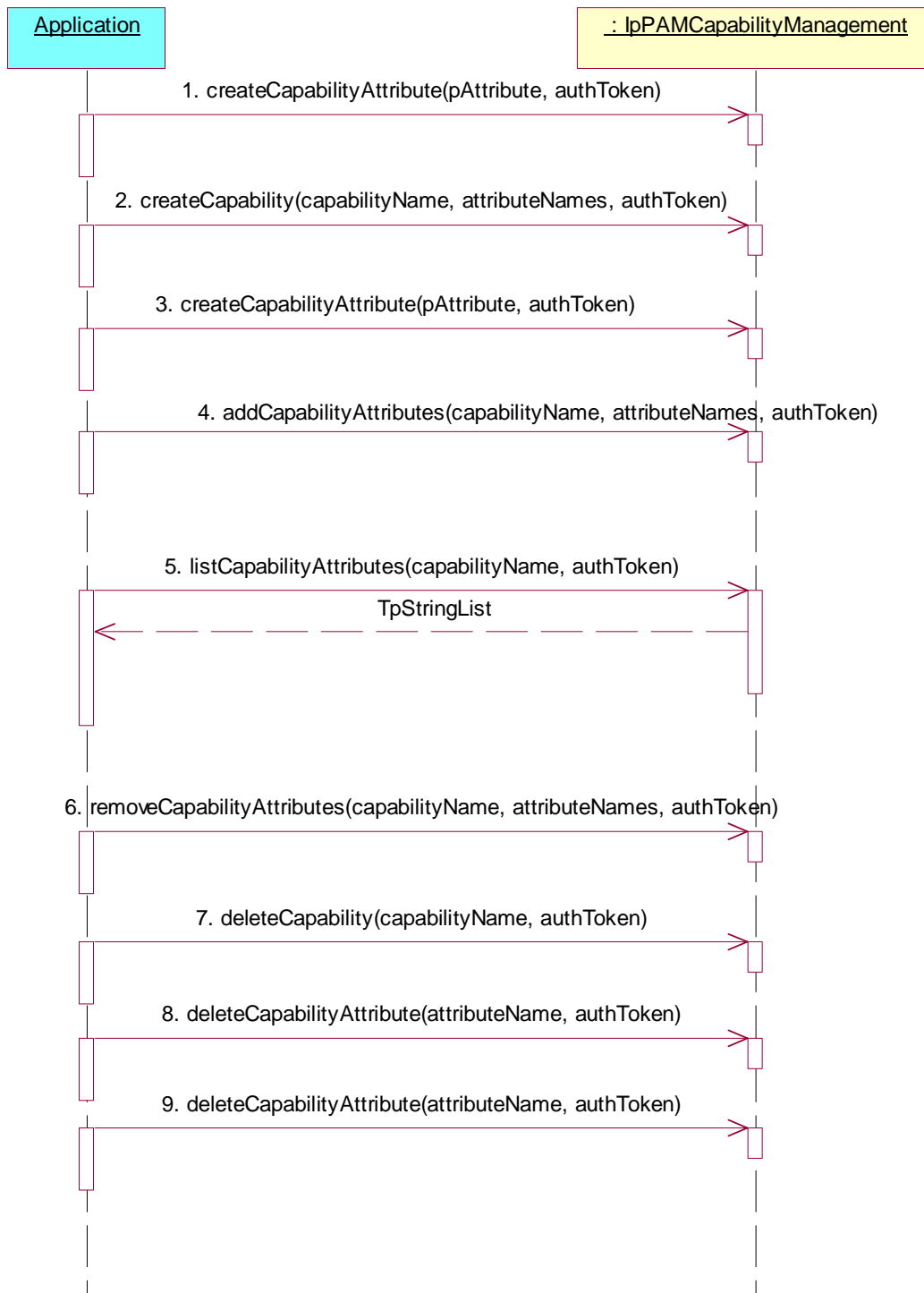
Summary: **IpPAMCapabilityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.7.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createCapabilityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createCapability()**  
Parameters: capabilityName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **createCapabilityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **addCapabilityAttributes()**  
Parameters: capabilityName given in 1., attributesNames included attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **listCapabilityAttributes()**  
Parameters: capabilityName given in 1., authToken as obtained in Preamble  
Check: valid value of TpStringList is returned
6. Method call **removeCapabilityAttributes()**  
Parameters: typeName given in 1., attributesNames given in 4., authToken as obtained in Preamble  
Check: no exception is returned
7. Method call **deleteCapability()**  
Parameters: capabilityName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **deleteCapabilityAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned
9. Method call **deleteCapabilityAttribute()**  
Parameters: attributeName given in 3., authToken as obtained in Preamble  
Check: no exception is returned



**Test PAM\_PM\_31**

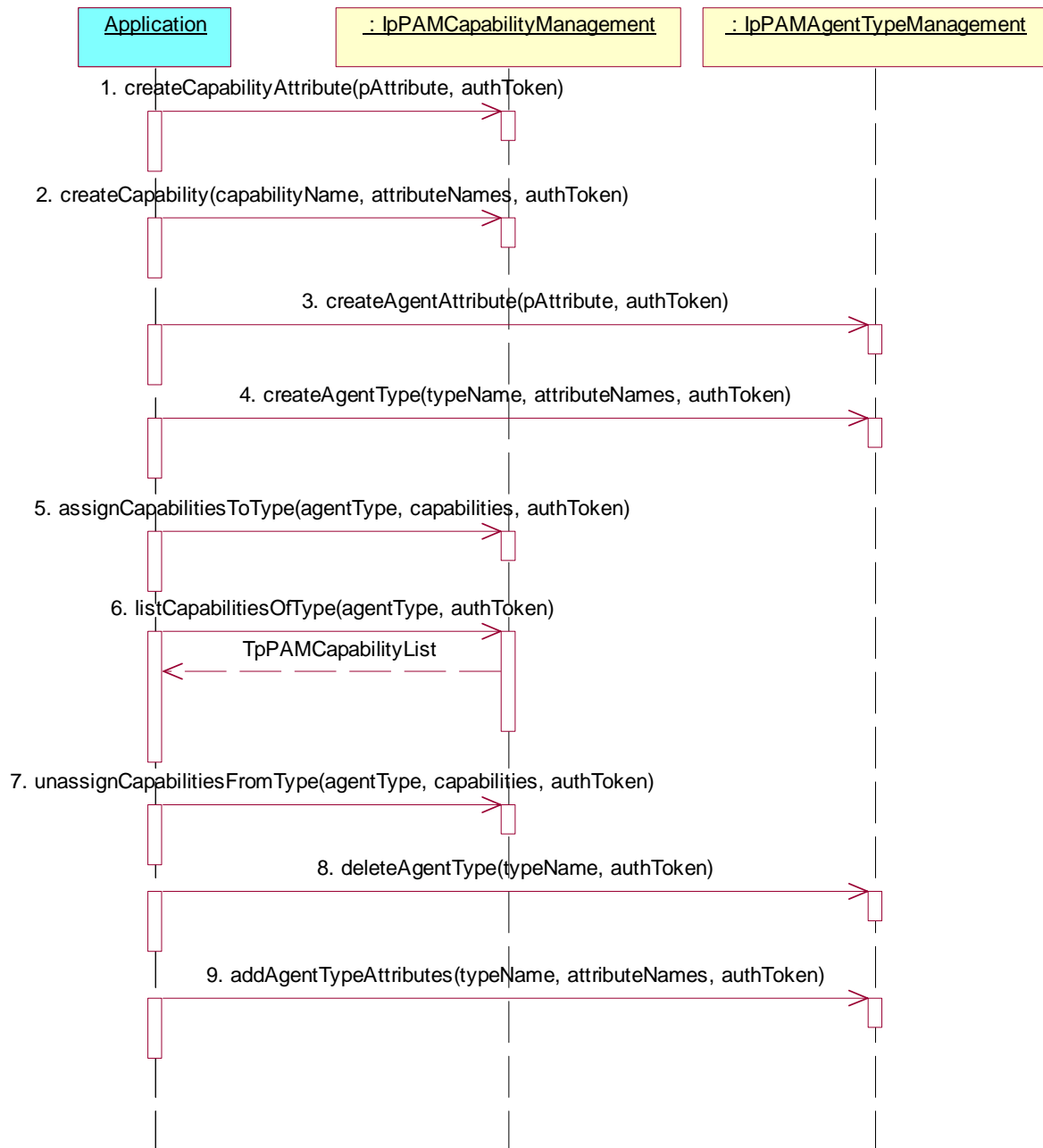
Summary: **IpPAMCapabilityManagement**, all methods successful.

Reference: ES 202 915-14 [1], clause 8.1.7.

Preamble: **Preamble\_getAuthToken\_PM**.

Test Sequence:

1. Method call **createCapabilityAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
2. Method call **createCapability()**  
Parameters: capabilityName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
3. Method call **IpPAMAgentTypeManagement.createAgentAttribute()**  
Parameters: pAttribute, authToken as obtained in Preamble  
Check: no exception is returned
4. Method call **IpPAMAgentTypeManagement.createAgentType()**  
Parameters: typeName, attributeNames, authToken as obtained in Preamble  
Check: no exception is returned
5. Method call **assignCapabilitiesToType ()**  
Parameters: agentType given in 4., capabilities included capability given in 2., authToken as obtained in Preamble  
Check: no exception is returned
6. Method call **listCapabilitiesofType ()**  
Parameters: agentType given in 4., authToken as obtained in Preamble  
Check: valid vale of TpPAMCapabilityList is returned
7. Method call **unassignCapabilitiesToType ()**  
Parameters: agentType given in 4., capabilities included capability given in 2., authToken as obtained in Preamble  
Check: no exception is returned
8. Method call **IpPAMAgentTypeManagement.deleteAgentType()**  
Parameters: typeName given in 2., authToken as obtained in Preamble  
Check: no exception is returned
9. Method call **IpPAMAgentTypeManagement.deleteAgentAttribute()**  
Parameters: attributeName given in 1., authToken as obtained in Preamble  
Check: no exception is returned





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## History

<b>Document history</b>		
V1.1.1	January 2005	Membership Approval Procedure MV 20050311: 2005-01-11 to 2005-03-11