

MS-ASRM Test Suite Specification

**Abstract:** This document provides information about how to configure the test suite and how MS-ASRM test suite is designed to test MS-ASRM Open Specification usability and accuracy. It describes test assumptions, scope and constraints of the test suite. It also specifies test scenarios, detailed test cases, test suite architecture and adapter design.

Contents

[1 Configuring the test suite 3](#_Toc387412170)

[1.1 Configuring the test suite client 3](#_Toc387412171)

[1.1.1 Configuring the test suite client manually 3](#_Toc387412172)

[1.1.2 Configuring the test suite client by scripts 3](#_Toc387412173)

[1.2 Configuring the system under test (SUT) 3](#_Toc387412174)

[1.2.1 Configuring the SUT manually 3](#_Toc387412175)

[1.2.2 Configuring the SUT by scripts 4](#_Toc387412176)

[1.3 Configuring the SHOULD/MAY requirements 4](#_Toc387412177)

[2 Test suite design 5](#_Toc387412178)

[2.1 Assumptions, scope and constraints 5](#_Toc387412179)

[2.2 Test suite architecture 5](#_Toc387412180)

[2.3 Technical dependencies and considerations 7](#_Toc387412181)

[2.4 Adapter design 7](#_Toc387412182)

[2.4.1 Adapter overview 7](#_Toc387412183)

[2.4.2 Technical feasibility of adapter approach 7](#_Toc387412184)

[2.4.3 Adapter abstract layer 8](#_Toc387412185)

[2.4.4 Adapter details 9](#_Toc387412186)

[2.5 Test scenarios 10](#_Toc387412187)

[2.5.1 S01\_Settings\_SendMail\_Sync 10](#_Toc387412188)

[2.5.2 S02\_ItemOperations 11](#_Toc387412189)

[2.5.3 S03\_Search 11](#_Toc387412190)

[2.5.4 S04\_SmartForward 12](#_Toc387412191)

[2.5.5 S05\_SmartReply 12](#_Toc387412192)

[2.6 Test case design 13](#_Toc387412193)

[2.6.1 Traditional test case design 13](#_Toc387412194)

[2.6.2 Test case description 14](#_Toc387412195)

# Configuring the test suite

## Configuring the test suite client

### Configuring the test suite client manually

Before you run the test suite, update the values in the MS-ASRM\_TestSuite.deployment.ptfconfig file. The MS-ASRM\_TestSuite.deployment.ptfconfig file can also be configured by running the client setup script.

1. Open MS-ASRM\TestSuite\MS-ASRM\_TestSuite.deployment.ptfconfig.
2. Update the following value to specify the common configuration file.

Property name="CommonConfigurationFileName" value="ExchangeCommonConfiguration.deployment.ptfconfig"

**Note** This property can be removed or set to empty if the required properties are copied to the test suite specific configuration file. Any other changes to this property will cause all test cases in the test suite to fail during execution. The test suite searches through its specific configuration file and uses those properties, if they are defined, before looking for them in the common configuration file (if specified).

1. Update the following properties' values to match SUT settings and configuration.

* Property name="User1Name" value="MSASRM\_User01"
* Property name="User1Password" value="Password01!"
* Property name="User2Name" value="MSASRM\_User02"
* Property name="User2Password" value="Password01!"
* Property name="User3Name" value="MSASRM\_User03"
* Property name="User3Password" value="Password01!"
* Property name="User4Name" value="MSASRM\_User04"
* Property name="User4Password" value="Password01!"

1. The following properties are not associated with SUT settings and can normally retain with the default values.

* Property name="SSLWaitTime" value="30000"
* Property name="SSLRetryCount" value="40"

### Configuring the test suite client by scripts

To configure the test suite client using scripts, see section 5.2.1 of the [ExchangeEASTestSuiteDeploymentGuide.docx](../ExchangeEASTestSuiteDeploymentGuide.docx).

## Configuring the system under test (SUT)

### Configuring the SUT manually

To manually configure the SUT, see section 5.1.2 of the [ExchangeEASTestSuiteDeploymentGuide.docx](../ExchangeEASTestSuiteDeploymentGuide.docx).

### Configuring the SUT by scripts

To configure the SUT using scripts, see section 5.1.1 of the [ExchangeEASTestSuiteDeploymentGuide.docx](../ExchangeEASTestSuiteDeploymentGuide.docx).

## Configuring the SHOULD/MAY requirements

Implementation of the SHOULD/MAY and endnote-related requirements are pre-configured in the format "<Property name="RXXXEnabled" value= "XXXX"/>" for the product versions in the following config files:

* MS-ASRM\_ExchangeServer2007\_SHOULDMAY.deployment.ptfconfig
* MS-ASRM\_ExchangeServer2010\_SHOULDMAY.deployment.ptfconfig
* MS-ASRM\_ExchangeServer2013\_SHOULDMAY.deployment.ptfconfig

If RXXXEnabled is set to true, the requirement must be checked. If false, the requirement must not be checked. For Microsoft product versions, all values should not be changed. For third-party products, the closest Microsoft product version should be chosen, and the value of RXXXEnabled should be updated according to the real product behavior. For example, if Exchange Server 2010 is chosen,user can open **MS-ASRM\_ExchangeServer2010\_SHOULDMAY.deployment.ptfconfig** and update the RXXXEnabled accordingly.

# Test suite design

## Assumptions, scope and constraints

Assumptions

None.

Scope

In scope

* This test suite will verify the accuracy and integrity of the technical content in the Open Specification against the results returned from the protocol server by using eight commands: FolderSync, SendMail, Sync, Search, ItemOperations, Settings, SmartForward and SmartReply.
* This test suite will verify all the XML schema elements embedded inside of the command response.
* This test suite will verify the server-side and testable requirements by running all the test cases on HTTPS and ActiveSync protocol version 14.1. And two test cases will also be run on HTTP to verify status error 168.
* This test suite will verify requirements from Exchange ActiveSync: Data Types ([MS-ASDTYPE]) and Exchange ActiveSync: WAP Binary XML Algorithm ([MS-ASWBXML]).

Out of scope

* This test suite will not verify the requirements related to client behaviors.
* This test suite will not verify the requirements related to server internal behaviors.
* This test suite will not verify the internal implementations of its transport protocol stack.

Constraints

None.

## Test suite architecture

This test suite verifies the server-side and testable requirements obtained from the Open Specification. The following figure shows the architecture of this test suite.



The architecture of the test suite

The details of the MS-ASRM test suite architecture

* SUT hosts the ActiveSync service which this test suite runs against.
* From third-party user’s point of view, the SUT is the protocol server implementation.
* The following products have been tested with the MS-ASRM test suite on the Windows platform.
* Microsoft Exchange Server 2010 Service Pack 3 (SP3)
* Microsoft Exchange Server 2013 Service Pack 1 (SP1)
* The test suite acts as the client to communicate with the SUT and validates the requirements gathered from the MS-ASRM Open Specification.
* Test cases use the MS-ASRM protocol adapter to call and get the results of the MS-ASRM Updcommands.
* MS-ASRM protocol adapter is used in the test cases. The test cases call the methods in the interfaces to invoke the MS-ASRM protocol adapter’s commands.
* MS-ASRM protocol adapter uses ActiveSyncClient to send command request and retrieve command response.
* ActiveSyncClient encodes and decodes FolderSync command, SendMail command, Sync command, Search command, ItemOperations command, Settings command, SmartForward command and SmartReply command defined in [MS-ASCMD] by using MS-ASWBXML and communicates with the SUT via MS-ASHTTP.
* SUT control adapter is used in the test cases. The test cases call the method in the interface to configure the SUT.

## Technical dependencies and considerations

Dependencies

* This test suite depends on the HTTPS protocol to transmit the messages.
* This test suite depends on the xsd.exe tool in the .NET Framework SDK to generate structures used in the MS-ASRM request and response.
* This test suite depends on the Protocol Test Framework (PTF) to derive managed adapter.
* This test suite depends on MS-ASWBXML to encode XMLrequests bodies into Wireless Application Protocol (WAP) Binary XML (WBXML) for transmission to an ActiveSync server.
* This test suite depends on MS-ASHTTP to synchronize data which is stored on the server.

Encryption consideration

* Transportation of MS-ASRM only includes HTTPS, and encryption will be handled by HTTPS.

## Adapter design

### Adapter overview

One protocol adapter and one SUT control adapter are used in this test suite.

Protocol adapter

* MS-ASRM protocol adapter
* The MS-ASRM adapter is a managed adapter, which is derived from the ManagedAdapterBase class in PTF.
* The MS-ASRM adapter has the following functionalities
* Choose HTTPS for transport;
* Construct requests of the eight commands used in MS-ASRM;
* Communicate with the SUT by sending requests to the SUT and receiving the corresponding responses from the SUT;
* Parse the response messages and validate the messages according to the XML schema.

SUT control adapter

* SUT control adapter
* The SUT control adapter will be a PowerShell scripted adapter.
* The SUT control adapter has the following functionalities
* Configure the SSL setting in SUT.
* The SUT control adapter is invoked by the test cases.

### Technical feasibility of adapter approach

Message generation

The MS-ASRM adapter gets the parameter values and calls the corresponding commands in ActiveSyncClient. The ActiveSyncClient serializes the parameter values to XML elements, and then encodes the request bodies into WBXML for transmission to an ActiveSync server.

Message consumption

The messages received from the SUT will be parsed in the ActiveSyncClient and be passed to the MS-ASRM adapter. The messages are then consumed in the MS-ASRM adapter to validate the message format and to validate the logic-related requirements in the test cases.

SUT control adapter

The SUT control adapter is designed to remotely control the SUT to configure SSL setting.

### Adapter abstract layer

Protocol adapter

MS-ASRM adapter interface

There are ten methods declared in the MS-ASRM adapter interface IMS\_ASRMAdapter.

Eight methods FolderSync, ItemOperations, Search, SendMail, Settings, SmartForward, SmartReply and Sync correspond to the eight MS-ASRM commands. And the other two methods SyncMail and SwitchUser are used to find email with specific subject, and switch current user to another to call ActiveSync commands.

The methods are described in the following table.

|  |  |  |
| --- | --- | --- |
| **No.** | **Methods** | **Description** |
| 1 | FolderSync | Synchronizes the collection hierarchy. |
| 2 | ItemOperations | Fetchs all information about Exchange object. |
| 3 | Search | Searchs items on the server. |
| 4 | SendMail | Sends MIME-formatted email messages to the server. |
| 5 | Settings | Gets the RightsManagement information. |
| 6 | SmartForward | Forwards messages without retrieving the full, original message from the server. |
| 7 | SmartReply | Reply to messages without retrieving the full, original message from the server. |
| 8 | SwitchUser | Change the current user to another to call ActiveSync commands. |
| 9 | Sync | Synchronizes data from the server. |
| 10 | SyncMail | Finds an email with specific subject. |

MS-ASRM adapter interface methods

SUT control adapter

SUT control adapter interface

There is one method declared in the SUT control adapter interface IMS\_ASRMSUTControlAdapter.

The method is described in the following table.

|  |  |  |
| --- | --- | --- |
| **No.** | **Methods** | **Description** |
| 1 | ConfigureSSLSetting | Configure the SSL setting in SUT. |

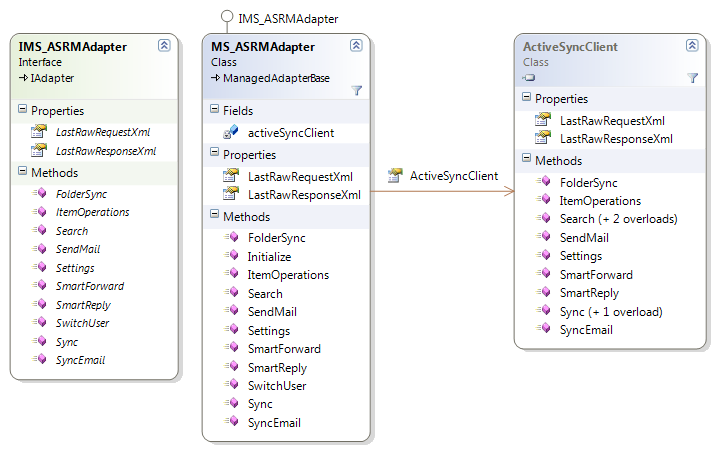
SUT control adapter interface method

### Adapter details

#### Protocol adapter

##### MS-ASRM protocol adapter

The following figure illustrates the class diagram of the MS-ASRM protocol adapter and the relationship between MS\_ASRMAdapter and ActiveSyncClient.



MS-ASRM adapter and ActiveSyncClient class diagram

The following outlines details of the class diagram:

Adapter interface

* IMS\_ASRMAdapter is the interface of the protocol adapter.
* IMS\_ASRMAdapter defines the methods invoked by test cases, including FolderSync, ItemOperations, Search, SendMail, Settings, SmartForward, SmartReply, SwitchUser, Sync and SyncMail methods.

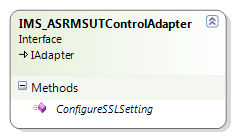
Adapter implementation

* MS\_ASRMAdapter is the protocol adapter class of the test suite. It is used to implement IMS\_ASRMAdapter.
* MS\_ASRMAdapter invokes the methods defined in ActiveSyncClient to synchronize information, find and send emails, search items, forward and reply messages, get RightsManagement information and switch user.
* The Initialize method is used to initialize an instance of ActiveSyncClient.
* The two properties LastRawRequestXml and LastRawResponseXml are used to get the raw request and response xml data.

#### SUT control adapter

##### SUT control adapter

The following figure illustrates the class diagram of the SUT control adapter.



SUT control adapter class diagram

The following outlines the details of the class diagram:

* The IMS\_ASRMSUTControlAdapter is the interface of the SUT control adapter which is implemented by Microsoft PowerShell script. The implementation can be substituted by other implementation for the third partys need.

## Test scenarios

Five scenarios are designed to cover the server-side, testable requirements in the MS-ASRM test suite. The details of the scenarios are as follows.

|  |  |
| --- | --- |
| Scenario | Description |
| S01\_Settings\_SendMail\_Sync | This scenario is designed to get templateIDs, send email messages and synchronize data from the server by using Settings, SendMail and Sync commands. |
| S02\_ItemOperations | This scenario is designed to fetch a rights-managed e-mail message with or without RemoveRightsManagementProtection element by using ItemOperations command. |
| S03\_Search | This scenario is designed to find rights-managed e-mail messages by using Search command. |
| S04\_SmartForward | This scenario is designed to forward messages by using SmartForward command. |
| S05\_SmartReply | This scenario is designed to reply messages by using SmartReply command. |

MS-ASRM scenarios

### S01\_Settings\_SendMail\_Sync

Description

This scenario is designed to get templateIDs, send email messages and synchronize data from the server by using Settings, SendMail and Sync commands.

Commands

* Sync
* SendMail
* Settings
* FolderSync

Prerequisites

The client logs on User1’s account, and calls FolderSync command.

Cleanup

Call Sync command to delete the items created in test cases.

### S02\_ItemOperations

Description

This scenario is designed to fetch a rights-managed e-mail message with or without RemoveRightsManagementProtection element by using ItemOperations command.

Commands

* Sync
* SendMail
* FolderSync
* ItemOperations

Prerequisites

The client logs on User1’s account, and calls FolderSync command.

Cleanup

Call Sync command to delete the items created in test cases.

### S03\_Search

Description

This scenario is designed to find rights-managed e-mail messages by using Search command.

Commands

* Sync
* SendMail
* FolderSync
* Search

Prerequisites

The client logs on User1’s account, and calls FolderSync command.

Cleanup

Call Sync command to delete the items created in test cases.

### S04\_SmartForward

Description

This scenario is designed to forward messages by using SmartForward command.

Commands

* Sync
* SendMail
* FolderSync
* SmartForward

Prerequisites

The client logs on User1’s account, and calls FolderSync command.

Cleanup

Call Sync command to delete the items created in test cases.

### S05\_SmartReply

Description

This scenario is designed to reply messages by using SmartReply command.

Commands

* Sync
* SendMail
* FolderSync
* SmartReply

Prerequisites

The client logs on User1’s account, and calls FolderSync command.

Cleanup

Call Sync command to delete the items created in test cases.

## Test case design

### Traditional test case design

Traditional testing is adopted as the test approach for this test suite. The test cases are designed to cover the server-side and testable requirements.

There are 42 traditional test cases designed to cover the five scenarios mentioned in section [2.6 Test scenarios](#_Test_scenarios_1). Details of the traditional test cases are specified in section [2.7.2 Test case description](#_Test_case_description). The scenarios distributions of the test cases are listed in the following table.

|  |  |
| --- | --- |
| Scenario ID | Test case name |
| S01\_Settings\_SendMail\_Sync | MSASRM\_S01\_TC01\_Sync\_RightsManagedEmailMessages |
| MSASRM\_S01\_TC02\_Sync\_Owner\_RightsManagedEmailMessages |
| MSASRM\_S01\_TC03\_Settings\_InvalidXMLBody\_ActiveSyncVersionNot141 |
| S02\_ItemOperations | MSASRM\_S02\_TC01\_ItemOperations\_RightsManagedEmailMessages |
| S03\_Search | MSASRM\_S03\_TC01\_Search\_RightsManagedEmailMessages |
| S04\_SmartForward | MSASRM\_S04\_TC01\_SmartForward\_EditAllowed\_False\_NoReplaceMime |
| MSASRM\_S04\_TC02\_SmartForward\_EditAllowed\_False\_ReplaceMime |
| MSASRM\_S04\_TC03\_SmartForward\_ExportAllowed\_True |
| MSASRM\_S04\_TC04\_SmartForward\_ForwardAllowed\_False |
| MSASRM\_S04\_TC05\_SmartForward\_Status171 |
| MSASRM\_S04\_TC06\_SmartForward\_NotProtected\_OriginalMessage\_NotProtected |
| MSASRM\_S04\_TC07\_SmartForward\_NotProtected\_OriginalMessage\_Protected |
| MSASRM\_S04\_TC08\_SmartForward\_HTTP\_Status168 |
| MSASRM\_S04\_TC09\_SmartForward\_Protected\_OriginalMessage\_NotProtected |
| MSASRM\_S04\_TC10\_SmartForward\_Protected\_OriginalMessage\_Protected\_DifferentTemplate |
| S05\_SmartReply | MSASRM\_S05\_TC01\_SmartReply\_EditAllowed\_False\_NoReplaceMime |
| MSASRM\_S05\_TC02\_SmartReply\_EditAllowed\_False\_ReplaceMime |
| MSASRM\_S05\_TC03\_SmartReply\_ExportAllowed\_True |
| MSASRM\_S05\_TC04\_SmartReplyAll\_ExportAllowed\_True |
| MSASRM\_S05\_TC05\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False\_Status172 |
| MSASRM\_S05\_TC06\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True\_Status172 |
| MSASRM\_S05\_TC07\_SmartReply\_ModifyRecipientsAllowed\_False |
| MSASRM\_S05\_TC08\_SmartReply\_ModifyRecipientsAllowed\_True |
| MSASRM\_S05\_TC09\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False |
| MSASRM\_S05\_TC10\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True |
| MSASRM\_S05\_TC11\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_False |
| MSASRM\_S05\_TC12\_SmartReply\_Status171 |
| MSASRM\_S05\_TC13\_SmartReply\_NotProtected\_OriginalMessage\_NotProtected |
| MSASRM\_S05\_TC14\_SmartReply\_HTTP\_Status168 |
| MSASRM\_S05\_TC15\_SmartReply\_Protected\_OriginalMessage\_NotProtected |
| MSASRM\_S05\_TC16\_SmartReply\_Protected\_OriginalMessage\_Protected\_DifferentTemplate |
| MSASRM\_S05\_TC17\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_SameTemplate |
| MSASRM\_S05\_TC18\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_DifferentTemplate |
| MSASRM\_S05\_TC19\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_SameTemplate |
| MSASRM\_S05\_TC20\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_DifferentTemplate |
| MSASRM\_S05\_TC21\_SmartReply\_Export\_False\_Edit\_False\_ReplaceMime\_DifferentTemplate |
| MSASRM\_S05\_TC22\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_SameTemplate |
| MSASRM\_S05\_TC23\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_DifferentTemplate |
| MSASRM\_S05\_TC24\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_SameTemplate |
| MSASRM\_S05\_TC25\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_DifferentTemplate |
| MSASRM\_S05\_TC26\_SmartReply\_Export\_False\_Edit\_False\_NoReplaceMime\_DifferentTemplate |

Test case scenario distribution

### Test case description

The following table describes the common prerequisites and common cleanup for all the test cases.

|  |  |
| --- | --- |
| Common prerequisites | 1. Uses HTTPS as the transport; 2. The client logs on User1’s account, and calls FolderSync command. |
| Common cleanup | Call Sync command to delete the items created in test cases. |

Test case common prerequisites and common cleanup

The steps in the following test cases use methods and parameters in the adapter interfaces directly.

The following tables describe the traditional test cases.

|  |  |
| --- | --- |
| S01\_Settings\_SendMail\_Sync | |
| Test case ID | MSASRM\_S01\_TC01\_Sync\_RightsManagedEmailMessages |
| Description | This test case is designed to call Sync command to synchronize a rights-managed e-mail message with different values of RightsManagementSupport element. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account and calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to false to synchronize changes of Inbox folder in User2's mailbox, and gets the neither decompressed nor decrypted rights-managed e-mail message. 5. The client logs on User2's account, calls Sync command without the RightsManagementSupport element in a request message to synchronize changes of Inbox folder in User2's mailbox, and gets the neither decompressed nor decrypted rights-managed e-mail message. |
| Cleanup | Common cleanup |

MSASRM\_S01\_TC01\_Sync\_RightsManagedEmailMessages

|  |  |
| --- | --- |
| S01\_Settings\_SendMail\_Sync | |
| Test case ID | MSASRM\_S01\_TC02\_Sync\_Owner\_RightsManagedEmailMessages |
| Description | This test case is designed to test the Owner element. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights denied except view rights. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message, then checks the Owner element. 4. The client logs on User1's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of SentItems folder in User1's mailbox, and gets the decompressed and decrypted rights-managed e-mail message, checks the Owner element. |
| Cleanup | Common cleanup |

MSASRM\_S01\_TC02\_Sync\_Owner\_RightsManagedEmailMessages

|  |  |
| --- | --- |
| S01\_Settings\_SendMail\_Sync | |
| Test case ID | MSASRM\_S01\_TC03\_Settings\_InvalidXMLBody\_ActiveSyncVersionNot141 |
| Description | This test case is designed to test that the server considers the XML body of the command request to be invalid when ActiveSync version is not equal to 14.1. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get the templateIDs, and checks the response of Settings command. |
| Cleanup | Common cleanup |
|  |  |

MSASRM\_S01\_TC03\_Settings\_InvalidXMLBody\_ActiveSyncVersionNot141

|  |  |
| --- | --- |
| S02\_ItemOperations | |
| Test case ID | MSASRM\_S02\_TC01\_ItemOperations\_RightsManagedEmailMessages |
| Description | This test case is designed to call ItemOperations command to fetch a rights-managed e-mail message with or without RemoveRightsManagementProtection element. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls ItemOperations command which contains the Fetch element without RemoveRightsManagementProtection element. 5. The client logs on User2's account and calls ItemOperations command which contains the Fetch element with RemoveRightsManagementProtection element. |
| Cleanup | Common cleanup |

MSASRM\_S02\_TC01\_ItemOperations\_RightsManagedEmailMessages

|  |  |
| --- | --- |
| S03\_Search | |
| Test case ID | MSASRM\_S03\_TC01\_Search\_RightsManagedEmailMessages |
| Description | This test case is designed to call Search command to find a rights-managed e-mail message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account and calls Search command to search the rights-managed e-mail message from server. |
| Cleanup | Common cleanup |

MSASRM\_S03\_TC01\_Search\_RightsManagedEmailMessages

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC01\_SmartForward\_EditAllowed\_False\_NoReplaceMime |
| Description | This test case is designed to test when EditAllowed is set to false and composemail:ReplaceMime is not present in a SmartForward request, the server will add the original rights-managed email message as an attachment to the new message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with EditAllowed is set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartForward method without ReplaceMime in request to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the rights-managed e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC01\_SmartForward\_EditAllowed\_False\_NoReplaceMime

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC02\_SmartForward\_EditAllowed\_False\_ReplaceMime |
| Description | This test case is designed to test when EditAllowed is set to false and composemail:ReplaceMime is present in a SmartForward request, the server will not attach the original rights-managed email message as an attachment. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with EditAllowed is set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartForward method with ReplaceMime in request to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the rights-managed e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC02\_SmartForward\_EditAllowed\_False\_ReplaceMime

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC03\_SmartForward\_ExportAllowed\_True |
| Description | This test case is designed to test when the user forwards the e-mail message and the ExportAllowed is true, the user can remove the IRM protection. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ExportAllowed set to true. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartForward method with TemplateID set to "00000000-0000-0000-0000-000000000000" in request to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and get the e-mail message which removed the IRM protection. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC03\_SmartForward\_ExportAllowed\_True

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC04\_SmartForward\_ForwardAllowed\_False |
| Description | This test case is designed to test when the user forwards the e-mail message and the ForwardAllowed is false, the user cannot forward the message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ForwardAllowed is set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartForward method to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox , and checks if the message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC04\_SmartForward\_ForwardAllowed\_False

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC05\_SmartForward\_Status171 |
| Description | This test case is designed to test when the request included an invalid TemplateID value, the server returns status value 171 in a SmartForward command response. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartForward method with an invalid TemplateID in request to forward the received email to User3, and checks the response of SmartForward command. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC05\_SmartForward\_Status171

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC06\_SmartForward\_NotProtected\_OriginalMessage\_NotProtected |
| Description | This test case is designed to test when the original message being forwarded has no rights management restrictions and no TemplateID element is included in the command request, the server sends the new message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls SendMail command without a templateID to send a message to User2, then switches to User2, and calls FolderSync command. 2. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 3. The client logs on User2's account and calls SmartForward method to forward the received email to User3. 4. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC06\_SmartForward\_NotProtected\_OriginalMessage\_NotProtected

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC07\_SmartForward\_NotProtected\_OriginalMessage\_Protected |
| Description | This test case is designed to test when the original message being forwarded has rights management restrictions and no TemplateID element is included in the command request, the server replaces the body of the message with boilerplate text. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 4. The client logs on User2's account and calls SmartForward method without a TemplateID in request to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC07\_SmartForward\_NotProtected\_OriginalMessage\_Protected

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC08\_SmartForward\_HTTP\_Status168 |
| Description | This test case is designed to test when the connection to the server does not use SSL, the server fails the request and returns composemail:Status value 168. |
| Prerequisites | 1. Uses HTTP as the transport. 2. The client logs on User1’s account, and calls FolderSync command. |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to false to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 4. The client logs on User2's account, calls SmartForward method with the TemplateID in request to forward the received email to User3, and checks the response of SmartForward command. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC08\_SmartForward\_HTTP\_Status168

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC09\_SmartForward\_Protected\_OriginalMessage\_NotProtected |
| Description | This test case is designed to test when the original message being forwarded has no rights management restrictions and the TemplateID element is included in the command request, the server protects the new outgoing message with the specified rights policy template. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command without the templateID to send a message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to false to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 4. The client logs on User2's account and calls SmartForward method with the TemplateID in request to forward the received email to User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the rights-managed e-mail message. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC09\_SmartForward\_Protected\_OriginalMessage\_NotProtected

|  |  |
| --- | --- |
| S04\_SmartForward | |
| Test case ID | MSASRM\_S04\_TC10\_SmartForward\_Protected\_OriginalMessage\_Protected\_DifferentTemplate |
| Description | This test case is designed to test when the original message is protected and the specified TemplateID value is different from the TemplateID value on the original message, the server verifies that the new TemplateID value exists on the server. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account and calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account and calls SmartForward method with the new TemplateID in request to forward the received email to User3. 6. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the rights-managed e-mail message. |
| Cleanup | Common cleanup |

MSASRM\_S04\_TC10\_SmartForward\_Protected\_OriginalMessage\_Protected\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC01\_SmartReply\_EditAllowed\_False\_NoReplaceMime |
| Description | This test case is designed to test when EditAllowed is set to false and composemail:ReplaceMime is not present in a SmartReply request, the server will add the original rights-managed email message as an attachment to the new message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with EditAllowed is set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls SmartReply method without ReplaceMime in request to reply the received email to User1. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and gets the rights-managed e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC01\_SmartReply\_EditAllowed\_False\_NoReplaceMime

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC02\_SmartReply\_EditAllowed\_False\_ReplaceMime |
| Description | This test case is designed to test when EditAllowed is set to false and composemail:ReplaceMime is present in a SmartReply request, the server will not attach the original rights-managed email message as an attachment. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with EditAllowed is set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls SmartReply method with ReplaceMime in request to reply the received email to User1. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC02\_SmartReply\_EditAllowed\_False\_ReplaceMime

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC03\_SmartReply\_ExportAllowed\_True |
| Description | This test case is designed to test when the user reply the e-mail message and the ExportAllowed is true, the user can remove the IRM protection. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ExportAllowed set to true. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with TemplateID set to "00000000-0000-0000-0000-000000000000" in request to reply the received email to User1. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and gets the e-mail message which removed the IRM protection. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC03\_SmartReply\_ExportAllowed\_True

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC04\_SmartReplyAll\_ExportAllowed\_True |
| Description | This test case is designed to test when the user replies the e-mail message to all recipients and the ExportAllowed is true, the user can remove the IRM protection. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ExportAllowed set to true. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2 and cc User3, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls SmartReply method with TemplateID set to "00000000-0000-0000-0000-000000000000" in request to reply the received email to User1 and cc User3. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and gets the e-mail message which removed the IRM protection. 6. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and gets the e-mail message which removed the IRM protection. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC04\_SmartReplyAll\_ExportAllowed\_True

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC05\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False\_Status172 |
| Description | This test case is designed to test when the user replies the e-mail message, the ReplyAllowed is true and the ReplyAllAllowed is false, the user cannot reply to all and will receive a response with status 172. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ReplyAllAllowed set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2 and cc User3, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1 and cc User3, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. 6. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC05\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False\_Status172

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC06\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True\_Status172 |
| Description | This test case is designed to test when the user reply the e-mail message, the ReplyAllowed is false and the ReplyAllAllowed is true, the user cannot reply to the sender and will receive a response with status 172. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ReplyAllowed set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC06\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True\_Status172

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC07\_SmartReply\_ModifyRecipientsAllowed\_False |
| Description | This test case is designed to test when the user reply the e-mail message and the ModifyRecipientsAllowed is false, the user cannot change the recipients in SmartReply command. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ModifyRecipientsAllowed set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls SmartReply method with TemplateID in request to reply the received email to another account:User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the e-mail message arrives**.** |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC07\_SmartReply\_ModifyRecipientsAllowed\_False

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC08\_SmartReply\_ModifyRecipientsAllowed\_True |
| Description | This test case is designed to test when the user replies the e-mail message and the ModifyRecipientsAllowed is true, the user can change the recipients in SmartReply command. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ModifyRecipientsAllowed set to true. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account and calls SmartReply method with TemplateID in request to reply the received email to another account:User3. 5. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the e-mail message arrives**.** |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC08\_SmartReply\_ModifyRecipientsAllowed\_True

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC09\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False |
| Description | This test case is designed to test when the user replies the e-mail message, the ReplyAllowed is true and the ReplyAllAllowed is false, the user can reply to the sender. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ReplyAllAllowed set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2 and cc User3, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives**.** |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC09\_SmartReply\_ReplyAllowed\_True\_ReplyAllAllowed\_False

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC10\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True |
| Description | This test case is designed to test when the user reply the e-mail message, the ReplyAllowed is false and the ReplyAllAllowed is true, the user can reply to all the recipients. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with ReplyAllowed set to false. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1 and cc User3, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. 6. The client logs on User3's account, calls Sync command to synchronize changes of Inbox folder in User3's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC10\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_True

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC11\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_False |
| Description | This test case is designed to test when ReplyAllowed and ReplyAllAllowed are set to FALSE, SmartReply command request error out with a composemail:Status value of 172. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights denied except view rights. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC11\_SmartReply\_ReplyAllowed\_False\_ReplyAllAllowed\_False

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC12\_SmartReply\_Status171 |
| Description | This test case is designed to test when the request included an invalid TemplateID value, the server returns status value 171 in a SmartReply command response. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the decompressed and decrypted rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with an invalid TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC12\_SmartReply\_Status171

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC13\_SmartReply\_NotProtected\_OriginalMessage\_NotProtected |
| Description | This test case is designed to test when the original message being replied has no rights management restrictions and no TemplateID element is included in the command request, the server sends the new message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls SendMail command without a templateID to send a message to User2, then switches to User2, and calls FolderSync command. 2. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 3. The client logs on User2's account and calls SmartReply method to reply the received email to User1. 4. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and gets the e-mail message |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC13\_SmartReply\_NotProtected\_OriginalMessage\_NotProtected

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC14\_SmartReply\_HTTP\_Status168 |
| Description | This test case is designed to test when the connection to the server does not use SSL, the server fails the request and returns composemail:Status value 168. |
| Prerequisites | 1. Uses HTTP as the transport. 2. The client logs on User1’s account, and calls FolderSync command. |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command without the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to false to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC14\_SmartReply\_HTTP\_Status168

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC15\_SmartReply\_Protected\_OriginalMessage\_NotProtected |
| Description | This test case is designed to test when the original message being replied has no rights management restrictions and the TemplateID element is included in the command request, the server protects the new outgoing message with the specified rights policy template. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command without the templateID to send a rights-managed e-mail message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to false to synchronize changes of Inbox folder in User2's mailbox, and gets the e-mail message. 4. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC15\_SmartReply\_Protected\_OriginalMessage\_NotProtected

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC16\_SmartReply\_Protected\_OriginalMessage\_Protected\_DifferentTemplate |
| Description | This test case is designed to test when the original message being replied has rights management restrictions and the TemplateID element is included in the command request, the server protects the new outgoing message with the specified rights policy template. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account and calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command without the templateID to send a message to User2, then switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with the TemplateID in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC16\_SmartReply\_Protected\_OriginalMessage\_Protected\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC17\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_SameTemplate |
| Description | This test case is designed to test when ExportAllowed, EditAllowed are set to true and with ReplaceMime element included in SmartReply request, the server will send the message when it uses the same TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the same TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC17\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_SameTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC18\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed, EditAllowed are set to true and with ReplaceMime element included in SmartReply request, the server will send the message when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC18\_SmartReply\_Export\_True\_Edit\_True\_ReplaceMime\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC19\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_SameTemplate |
| Description | This test case is designed to test when ExportAllowed is set to false, EditAllowed is set to true and with ReplaceMime element included in SmartReply request, the server will send the message when it uses the same TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the same TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC19\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_SameTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC20\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed is set to false, EditAllowed is set to true and with ReplaceMime element included in SmartReply request, the server will send the message when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC20\_SmartReply\_Export\_False\_Edit\_True\_ReplaceMime\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC21\_SmartReply\_Export\_False\_Edit\_False\_ReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed and EditAllowed are set to false and with ReplaceMime element included in SmartReply request, the server will send the message when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC21\_SmartReply\_Export\_False\_Edit\_False\_ReplaceMime\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC22\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_SameTemplate |
| Description | This test case is designed to test when ExportAllowed and EditAllowed are set to true and without ReplaceMime element included in SmartReply request, the server will send the message including the original message as inline content when it uses the same TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the same TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC22\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_SameTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC23\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed and EditAllowed is set to true and without ReplaceMime element included in SmartReply request, the server will send the message including the original message as inline content when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC23\_SmartReply\_Export\_True\_Edit\_True\_NoReplaceMime\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC24\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_SameTemplate |
| Description | This test case is designed to test when ExportAllowed is set to false, EditAllowed is set to true and without ReplaceMime element included in SmartReply request, the server will send the message, including the original message as inline content when it uses the same TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls SmartReply method with the same TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 5. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC24\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_SameTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC25\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed is set to false, EditAllowed is set to true and without ReplaceMime element included in SmartReply request, the server will send the message, including the original message as an attachment when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC25\_SmartReply\_Export\_False\_Edit\_True\_NoReplaceMime\_DifferentTemplate

|  |  |
| --- | --- |
| S05\_SmartReply | |
| Test case ID | MSASRM\_S05\_TC26\_SmartReply\_Export\_False\_Edit\_False\_NoReplaceMime\_DifferentTemplate |
| Description | This test case is designed to test when ExportAllowed and EditAllowed are set to false and without ReplaceMime element included in SmartReply request, the server will send the message, including the original message as an attachment when it uses a different TemplateID with the original message. |
| Prerequisites | Common prerequisites |
| Test execution steps | 1. The client logs on User1's account, calls Settings command to get a templateID with all rights allowed. 2. The client logs on User1's account, calls SendMail command with the templateID to send a message to User2, switches to User2, and calls FolderSync command. 3. The client logs on User2's account, calls Sync command with RightsManagementSupport element set to true to synchronize changes of Inbox folder in User2's mailbox, and gets the rights-managed e-mail message. 4. The client logs on User2's account, calls Settings command to get another templateID with forward rights allowed. 5. The client logs on User2's account, calls SmartReply method with a new TemplateID and ReplaceMime element in request to reply the received email to User1, and checks the response of SmartReply command. 6. The client logs on User1's account, calls Sync command to synchronize changes of Inbox folder in User1's mailbox, and checks if the e-mail message arrives. |
| Cleanup | Common cleanup |

MSASRM\_S05\_TC26\_SmartReply\_Export\_False\_Edit\_False\_NoReplaceMime\_DifferentTemplate