
HIMSS and RSNA
Integrating the Healthcare Enterprise

IHE IT Infrastructure Test Cases

Electronic Radiology Laboratory
Mallinckrodt Institute of Radiology
510 South Kingshighway Blvd.
St. Louis, MO 63110
314.362.6965 (Voice)
314.362.6971 (Fax)

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1	Introduction.....	4
1.1	Patient Identification	4
2	Test Cases: RID	7
2.1	Test Case 10101: RID Use Case 1	8
2.2	Test Case 10102: RID Use Case 2	8
2.3	Test Case 10103: RIS Use Case 3	8
2.4	Test Case 10111: RID Retrieve Specific Info Request Keys 1	8
2.5	Test Case 10112: RID Retrieve Specific Info Request Keys 2	8
2.6	Test Case 10113: RID Retrieve Specific Info Request Keys 3	9
2.7	Test Case 10121: RID Summary of Reports	9
2.8	Test Case 10122: RID List of Information Items	10
2.9	Test Case 10131: RID Retrieve Specific Info Request Response Code 401	10
2.10	Test Case 10132: RID Retrieve Specific Info Request Response Code 404	10
2.11	Test Case 10133: RID Retrieve Specific Info Request Response Code 406	11
2.12	Test Case 10141: RID Retrieve Document JPEG	11
2.13	Test Case 10142: RID Retrieve Document PDF	12
2.14	Test Case 10143: RID Retrieve Document CDA	12
2.15	Test Case 10144: RID Retrieve Document JPEG/PDF	12
2.16	Test Case 10145: RID Retrieve Document Bad Request	13
2.17	Test Case 10146: RID Retrieve Document with Unsupported Document Type	13
2.18	Test Case 10147: RID Retrieve Non-Existing Document	14
3	Test Cases: EUA	15
3.1	Test Case 10301: EUA Kerberos Authentication	15
3.2	Test Case 10311: EUA Kerberized Communication: HTTP	15
3.3	Test Case 10321: EUA User Authentication with User Synchronized Applications	16
3.4	Test Case 10322: EUA Fast User Switching with Multiple Applications	16
3.5	Test Case 10331: Join Context	17
3.6	Test Case 10332: Change Context	17
3.7	Test Case 10333: Leave Context	18
3.8	Test Case 10334: Follow Context	18
4	Test Cases: PIX.....	20
4.1	Test Case 10501: PIX Query Case 1 and Case 2	21
4.2	Test Case 10502: PIX Query Case 3	21
4.3	Test Case 10503: PIX Query Case 4	22
4.4	Test Case 10504: PIX Query Case 5	23
4.5	Test Case 10505: PIX Query Case 6	23
4.6	Test Case 10506: PIX Query, Patient Update	23
4.7	Test Case 10507: PIX Query, Patient Merge	24
4.8	Test Case 10511: PIX Patient Feed: A01	24
4.9	Test Case 10512: PIX Patient Feed: A04	24
4.10	Test Case 10513: PIX Patient Feed: A05	25
4.11	Test Case 10514: PIX Patient Feed: A08	25
4.12	Test Case 10515: PIX Patient Feed: A40	26
4.13	Test Case 10531: PIX Update Notification: MESA 1	27
4.14	Test Case 10532: PIX Update Notification: MESA 2	27

4.15	Test Case 10533: PIX Update Notification: MESA 3	28
4.16	Test Case 10541: PIX Integrated Test 1	28
4.17	Test Case 10542: PIX Integrated Test 2	29
4.18	Test Case 10543: PIX Integrated Test 3	29
5	Test Cases: PSA.....	31
5.1	Test Case 10701: PSA Simple Patient Switching	31
5.2	Test Case 10731: Join Context.....	31
5.3	Test Case 10732: Change Context	32
5.4	Test Case 10733: Leave Context.....	32
5.5	Test Case 10734: Follow Context	33
6	Test Cases: CT	34
6.1	Test Case 10901: CT Manual Configuration.....	34
6.2	Test Case 10902: CT DHCP Configuration	34
6.3	Test Case 10903: CT Automatic Configuration.....	35
6.4	Test Case 10911: CT NTP Test 1.....	35
6.5	Test Case 10912: CT NTP Test 2.....	36
6.6	Test Case 10913: CT SNTP Test 1.....	36
6.7	Test Case 10914: CT SNTP Test 2.....	37

1 Introduction

The MESA tests include a number of cases each of which rely on a sequence of messages between actors. These tests range across different integration profiles:

- Retrieve Information for Display
- Enterprise User Authentication
- Patient Identity Cross Reference for MPI
- Patient Synchronized Application
- Consistent Time

This document lists the transactions and messages for a number of cases. It may not describe the clinical scenario behind each case, but listing the transactions should clearly define what is expected of each actor. These are all of the transactions involving all of the actors. When you test with your particular actor, you may see only a subset of these messages.

1.1 Patient Identification

The tests involve a small set of patients. In some of the tests, we update patient names. The table below is a list of patients and patient IDs used in the tests.

Patient ID (ADT)	Temp Patient ID (Order Filler)	Last Name	First Name	Test Number
RID10101		ELBE	ERNIE	10101
		OLT	OLLIE	10102
		ENNS	EVELYN	10103
RID10111		CRIS	CHARLIE	10111
RID10112		DANUBE	DARLENE	10112
		DOURO	DRACO	10113
		DRAVE	DONNA	10121
		GARONNE	GREG	10122
		EBRE	ERNESTINE	10131
		KRKA	KRIS	10132
		MURES	MICHAEL	10133
		MARNE	MICHELLE	10134
		INN	INA	10141

		ARGES	AGNES	10142
		PRUT	PETER	10143
		RHINE	RALPH	
		RHONE	RITA	
		SAALE	SUZANNE	
		SOMES	STUART	
		SAVA	STEVE	
		SEINE	SALLY	
		THAMES	THOMAS	
		TIMIS	TIMOTHY	
		TISSA	TERESA	
PIX10501		ALPHA	ALAN	10501
XYZ10501		ALPHA	ALAN	10501
ABC10501		SIMPSON	CARL	10501
PIX10502		BETA	BETTY	10502
XYZ10502		CROSS	KEN	10502
PIX10506		TAU	TERI	10506
ABC10506		TAU	T/TERI	10506
PIX10511		GAMMA		
PIX10512		EPSILON	ELLIE	10512
PIX10513		ZETA		
PIX10514		ETA	ERIC	10514
ABC10514		ETA	ERIC/E	10514
PIX10515		THETA		
PIX10521		IOTA		
PIX10522		KAPPA		
PIX10523		LAMDA		
PIX10524		MU		
PIX10531		NU		
PIX10532		XI		
PIX10533		OMIKRON		
PIX10541		PI		
PIX10542		RHO		

PIX10543		SIGMA		
		UPSILON		
		PHI		
		CHI		
		PSI		
		OMEGA		

2 Test Cases: RID

This section describes test cases that are generally associated with the RID Integration Profile. There may be some overlap with other profiles.

Each test case involves a series of transactions involving one test patient. Some patients may require that a single actor participate in multiple transactions. The tables in this section give the order of messages for an integrated system with all actors. This is provided as a centralized reference. To test an individual IHE actor, refer to the appropriate test document.

2.1 Test Case 10101: RID Use Case 1

2.2 Test Case 10102: RID Use Case 2

2.3 Test Case 10103: RIS Use Case 3

2.4 Test Case 10111: RID Retrieve Specific Info Request Keys 1

Test case 10111 covers RID Web Service Request Keys. These behaviors are tested:

- A specific patient ID is defined.
- A specific type of request is required (SUMMARY).
- Display makes a request for specific information and displays response.
- Information Source receives a request for specific information and returns response.

The nominal patient name is CRIS^CHARLIE.

2.4.1 References

ITI TF-2: 3.11.4

2.4.2 Direct Actors

Display

Information Source

2.4.3 Supporting Actors

None

2.5 Test Case 10112: RID Retrieve Specific Info Request Keys 2

Test case 10112 covers RID Web Service Request Keys. These behaviors are tested:

- A specific patient ID is defined.
- All request types other than SUMMARY are allowed. Only one is required to be tested.
- Display makes a request for specific information and displays response.
- Information Source receives a request for specific information and returns response.

The nominal patient name is DANUBE^DARLENE.

2.5.1 References

ITI TF-2: 3.11.4

2.5.2 Direct Actors

Display

Information Source

2.5.3 Supporting Actors

None

2.6 Test Case 10113: RID Retrieve Specific Info Request Keys 3

Test case 10113 covers RID Web Service Request Keys

2.6.1 References

ITI TF-2: 3.11.4

2.6.2 Direct Actors

Display

Information Source

2.6.3 Supporting Actors

None

2.7 Test Case 10121: RID Summary of Reports

Test case 10121 covers RID Summary of Reports

2.7.1 References

ITI TF-2: 3.11.4.2.2.1

2.7.2 Direct Actors

Display

Information Source

2.7.3 Supporting Actors

None

2.8 Test Case 10122: RID List of Information Items

Test case 10122 covers RID Summary of Reports

2.8.1 References

ITI TF-2: 3.11.4.2.2.2

2.8.2 Direct Actors

Display

Information Source

2.8.3 Supporting Actors

None

2.9 Test Case 10131: RID Retrieve Specific Info Request Response Code 401

Test case 10131 covers the RID queries and the HTTP response code 401.

2.9.1 References

ITI TF-2: 3.11.4.1.3

2.9.2 Direct Actors

Display

Information Source

2.9.3 Supporting Actors

None

2.10 Test Case 10132: RID Retrieve Specific Info Request Response Code 404

Test case 10132 covers the RID queries and the HTTP response code 404. The Display actor makes a request to the MESA Information Source for a report that does not exist. The Information Source sends the HTTP response code 404.

2.10.1 References

ITI TF-2: 3.11.4.1.3

2.10.2 Direct Actors

Display

Information Source

2.10.3 Supporting Actors

None

2.11 Test Case 10133: RID Retrieve Specific Info Request Response Code 406

Test case 10133 covers the RID queries and the HTTP response code 406.

2.11.1 References

ITI TF-2: 3.11.4.1.3

2.11.2 Direct Actors

Display

Information Source

2.11.3 Supporting Actors

None

2.12 Test Case 10141: RID Retrieve Document JPEG

Test case 10141 covers the RID transaction to retrieve a JPEG document. The information source is expected to have at least one document that can be retrieved in JPEG format.

2.12.1 References

ITI TF-2: 3.12.4

2.12.2 Direct Actors

Display

Information Source

2.12.3 Supporting Actors

None

2.13 Test Case 10142: RID Retrieve Document PDF

Test case 10142 covers the RID transaction to retrieve a PDF document. The information source is expected to have at least one document that can be retrieved in PDF format.

2.13.1 References

ITI TF-2: 3.12.4

2.13.2 Direct Actors

Display

Information Source

2.13.3 Supporting Actors

None

2.14 Test Case 10143: RID Retrieve Document CDA

Test case 10143 covers the RID transaction to retrieve a CDA document.

2.14.1 References

ITI TF-2: 3.12.4

2.14.2 Direct Actors

Display

Information Source

2.14.3 Supporting Actors

None

2.15 Test Case 10144: RID Retrieve Document JPEG/PDF

Test case 10144 covers the RID transaction to retrieve a JPEG or PDF document. In this test, the document can be returned by the Information Source as a JPEG image or PDF document. The Display requests the document (by UID) and can specify one or both formats in the HTTP Field “Accept”.

2.15.1 References

ITI TF-2: 3.12.4

2.15.2 Direct Actors

Display

Information Source

2.15.3 Supporting Actors

None

2.16 Test Case 10145: RID Retrieve Document Bad Request

Test case 10145 covers the RID transaction to retrieve a JPEG. In this test, the value specified for preferredContentType is not one of the values in the HTTP Accept request field. The Information Source is expected to return a status value of 400 (Bad Request) in this case.

2.16.1 References

ITI TF-2: 3.12.4.1.3

2.16.2 Direct Actors

Display

Information Source

2.16.3 Supporting Actors

None

2.17 Test Case 10146: RID Retrieve Document with Unsupported Document Type

Test case 10146 covers the RID transaction to retrieve a document that is stored in a format that is not supported by the Image Display. The example is a CDA document that is stored; the Image Display is configured to only support JPEG and PDF documents. This case tests one of the exception modes; the Information Source will not return a document to the Image Display but will return an error code.

2.17.1 References

ITI TF-2: 3.12.4

2.17.2 Direct Actors

Display

Information Source

2.17.3 Supporting Actors

None

2.18 Test Case 10147: RID Retrieve Non-Existing Document

Test case 10147 covers the RID transaction to retrieve a document that does not exist in the Information Source. This case tests one of the exception modes; the Information Source will not return a document to the Image Display but will return an error code.

The Information Source is expected to return the Error Code 404 – Not Found.

2.18.1 References

ITI TF-2: 3.12.4

2.18.2 Direct Actors

Display

Information Source

2.18.3 Supporting Actors

None

3 Test Cases: EUA

This section describes test cases that are generally associated with the EUA Integration Profile. There may be some overlap with other profiles.

Each test case involves a series of transactions involving one test patient. Some patients may require that a single actor participate in multiple transactions. The tables in this section give the order of messages for an integrated system with all actors. This is provided as a centralized reference. To test an individual IHE actor, refer to the appropriate test document.

3.1 Test Case 10301: EUA Kerberos Authentication

Test case 10301 covers the EUA Kerberos Authentication. A user “logs-in” to a client computer using Kerberos authentication with a Kerberos Authentication Server.

3.1.1 References

ITI TF-1: 4.3.1

3.1.2 Direct Actors

Client Authentication Agent

Kerberos Authentication Server

3.1.3 Supporting Actors

None

3.2 Test Case 10311: EUA Kerberized Communication: HTTP

Test case 10311 covers the EUA Kerberized HTTP communication.

3.2.1 References

ITI TF-1: 4.3.1

3.2.2 Direct Actors

Client Authentication Agent

Kerberos Authentication Server

3.2.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.3 Test Case 10321: EUA User Authentication with User Synchronized Applications

Test case 10321 covers the EUA user authentication with user synchronized applications.

3.3.1 References

ITI TF-1: 4.3.2

3.3.2 Direct Actors

Client Authenticaiton Agent
User Context Participant
Context Manager

3.3.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.4 Test Case 10322: EUA Fast User Switching with Multiple Applications

Test case 10322 covers the EUA fast user switching with multiple applications.

3.4.1 References

ITI TF-1: 4.3.2

3.4.2 Direct Actors

Client Authenticaiton Agent
User Context Participant
Context Manager

3.4.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.5 Test Case 10331: Join Context

Test case 10331 covers the EUA Join Context transaction.

3.5.1 References

ITI TF-2: 3.5

3.5.2 Direct Actors

Client Authentication Agent

User Context Participant

Context Manager

3.5.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.6 Test Case 10332: Change Context

Test case 10332 covers the EUA Change Context transaction.

3.6.1 References

ITI TF-2: 3.6

3.6.2 Direct Actors

Client Authentication Agent

User Context Participant

Context Manager

3.6.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.7 Test Case 10333: Leave Context

Test case 10333 covers the EUA Leave Context transaction.

3.7.1 References

ITI TF-2: 3.7

3.7.2 Direct Actors

Client Authentication Agent

User Context Participant

Context Manager

3.7.3 Supporting Actors

None

Identifier	Description	Source	Destination

3.8 Test Case 10334: Follow Context

Test case 10334 covers the EUA Leave Context transaction.

3.8.1 References

ITI TF-2: 3.13

3.8.2 Direct Actors

Client Authentication Agent

User Context Participant

Context Manager

3.8.3 Supporting Actors

None

Identifier	Description	Source	Destination

4 **Test Cases: PIX**

This section describes test cases that are generally associated with the PIX Integration Profile. There may be some overlap with other profiles.

Each test case involves a series of transactions involving one test patient. Some patients may require that a single actor participate in multiple transactions. The tables in this section give the order of messages for an integrated system with all actors. This is provided as a centralized reference. To test an individual IHE actor, refer to the appropriate test document.

4.1 Test Case 10501: PIX Query Case 1 and Case 2

Test case 10501 covers the PIX Query Case 1 and 2. One patient (ALPHA) is registered in two different domains. A second patient (SIMPSON) is registered in a single domain. Three registration messages are sent to a Cross Reference Manager.

A PIX Query is sent to resolve a reference to ALPHA. A second PIX Query is sent to resolve a reference to SIMPSON. Because SIMPSON is not registered in the second domain, the response to that PIX Query will indicate no data.

4.1.1 References

ITI TF-2: 3.9.4.2.2

4.1.2 Direct Actors

Patient Identity Source

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.1.3 Supporting Actors

None

Identifier	Description	Source	Destination
10501.102.a04.hl7	Registration message for ALPHA : Domain 1	PID Source, Domain 1	XRef Mgr
10501.104.a04.hl7	Registration message for SIMPSON: Domain 1	PID Source, Domain 1	XRef Mgr
10501.106.a04.hl7	Registration message for ALPHA: Domain 2	PID Source, Domain 2	XRef Mgr
10501.108.q23.hl7	PIX Query for ALPHA	PIX XRef Consumer	XRef Mgr
10501.110.q23.hl7	PIX Query for SIMPSON	PIX XRef Consumer	XRef Mgr

4.2 Test Case 10502: PIX Query Case 3

Test case 10502 covers the PIX Query case 3. Two patients are registered in a single domain. A PIX consumer sends a query for a third patient who is not recognized as one of the two registered patients.

4.2.1 References

ITI TF-2: 3.9.4.2.2

4.2.2 Direct Actors

Patient Identity Source
Patient Identity Consumer
Patient Identity Cross-reference Manager

4.2.3 Supporting Actors

None

Identifier	Description	Source	Destination
10502.102.a04.hl7	Registration message for BETA : Domain 1	PID Source, Domain 1	XRef Mgr
10502.104.a04.hl7	Registration message for CROSS: Domain 1	PID Source, Domain 1	XRef Mgr
10502.106.q23.hl7	PIX Query for BRIDGE	PIX XRef Consumer	XRef Mgr

4.3 Test Case 10503: PIX Query Case 4

Test case 10503 covers the PIX Query case 4. No new patients are registered. A PIX query is sent with a Patient ID that includes an unknown issuer (value is ‘XXXX’). The Cross Reference Manager responds appropriately.

4.3.1 References

ITI TF-2: 3.9.4.2.2

4.3.2 Direct Actors

Patient Identity Source
Patient Identity Consumer
Patient Identity Cross-reference Manager

4.3.3 Supporting Actors

None

Identifier	Description	Source	Destination
10503.102.q23.hl7	PIX Query for Patient ID with issuer XXXX	PIX XRef Consumer	XRef Mgr

4.4 Test Case 10504: PIX Query Case 5

4.5 Test Case 10505: PIX Query Case 6

4.6 Test Case 10506: PIX Query, Patient Update

Test case 10506 covers PIX Patient Feed, the ADT^A08 message, and PIX queries. Patient TAU^TERI is registered in domain ADT1 with “correct” demographics. This patient is then registered in ADT2 with incorrect demographics. The demographics are sufficiently different that a Cross Reference Manager should not link these two records.

A patient update message is sent for the patient in domain ADT2 that should synchronize the demographics with those seen in ADT1. The Cross Reference Manager should now link the two records.

4.6.1 References

ITI TF-2: 3.8.4

4.6.2 Direct Actors

Patient Identity Source

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.6.3 Supporting Actors

None

Identifier	Description	Source	Destination
10506.102.A04.hl7	ADT^A04: Register TAU	Identity Src 1	XRef Mgr
10506.104.A04.hl7	ADT^A04: Register TAU (bad demographics)	Identity Src 2	XRef Mgr
10506.106.q23.hl7	PIX Query for TAU	PIX XRef Consumer	XRef Mgr
10506.108.a08.hl7	ADT^A04: Update demographics	Identity Src 2	XRef Mgr
10506.110.q23.hl7	PIX Query for TAU	PIX XRef Consumer	XRef Mgr

4.7 Test Case 10507: PIX Query, Patient Merge

Test case 10507 covers PIX Patient Feed, the ADT^A40 message, and PIX queries.

4.8 Test Case 10511: PIX Patient Feed: A01

Test case 10511 covers PIX Patient Feed and the ADT^A01 message.

4.8.1 References

ITI TF-2: 3.8.4

4.8.2 Direct Actors

Patient Identity Source

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.8.3 Supporting Actors

None

Identifier	Description	Source	Destination
10512.102.A04. ADT	ADT^A04: Register EPSILON	Identity Src	Xref Mgr

4.9 Test Case 10512: PIX Patient Feed: A04

Test case 10512 covers PIX Patient Feed and the ADT^A04 message. These behaviors are tested:

- Patient Identity Source formulates an A04 message with the proper content
- Patient Identity Cross-reference Manager can receive and process a properly constructed ADT^A04 message.

The nominal patient name is EPSILON^ELLIE.

4.9.1 References

ITI TF-2: 3.8.4

4.9.2 Direct Actors

Patient Identity Source
Patient Identity Consumer
Patient Identity Cross-reference Manager

4.9.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.10 Test Case 10513: PIX Patient Feed: A05

Test case 10513 covers PIX Patient Feed and the ADT^A05 message.

4.10.1 References

ITI TF-2: 3.8.4

4.10.2 Direct Actors

Patient Identity Source
Patient Identity Consumer
Patient Identity Cross-reference Manager

4.10.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.11 Test Case 10514: PIX Patient Feed: A08

Test case 10514 covers PIX Patient Feed and the ADT^A08 message.

4.11.1 References

ITI TF-2: 3.8.4

4.11.2 Direct Actors

Patient Identity Source

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.11.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.12 Test Case 10515: PIX Patient Feed: A40

Test case 10515 covers PIX Patient Feed and the ADT^A40 message.

4.12.1 References

ITI TF-2: 3.8.4

4.12.2 Direct Actors

Patient Identity Source

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.12.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.13 Test Case 10531: PIX Update Notification: MESA 1

Test case 10531 covers a use case involving the PIX Update Notification transaction and behavior of the Cross-reference Manager.

4.13.1 References

ITI TF-2: 3.10

4.13.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.13.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.14 Test Case 10532: PIX Update Notification: MESA 2

Test case 10532 covers a use case involving the PIX Update Notification transaction and behavior of the Cross-reference Manager.

4.14.1 References

ITI TF-2: 3.10

4.14.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.14.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.15 Test Case 10533: PIX Update Notification: MESA 3

Test case 10533 covers a use case involving the PIX Update Notification transaction and behavior of the Cross-reference Manager.

4.15.1 References

ITI TF-2: 3.10

4.15.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.15.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.16 Test Case 10541: PIX Integrated Test 1

Test case 10541 covers a use case with several PIX transactions integrated into a larger test.

4.16.1 References

ITI TF-2: 3.10

4.16.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.16.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.17 Test Case 10542: PIX Integrated Test 2

Test case 10542 covers a use case with several PIX transactions integrated into a larger test.

4.17.1 References

ITI TF-2: 3.10

4.17.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.17.3 Supporting Actors

None

Identifier	Description	Source	Destination

4.18 Test Case 10543: PIX Integrated Test 3

Test case 10543 covers a use case with several PIX transactions integrated into a larger test.

4.18.1 References

ITI TF-2: 3.10

4.18.2 Direct Actors

Patient Identity Consumer

Patient Identity Cross-reference Manager

4.18.3 Supporting Actors

None

Identifier	Description	Source	Destination

5 Test Cases: PSA

This section describes test cases that are generally associated with the PSA Integration Profile. There may be some overlap with other profiles.

Each test case involves a series of transactions involving one test patient. Some patients may require that a single actor participate in multiple transactions. The tables in this section give the order of messages for an integrated system with all actors. This is provided as a centralized reference. To test an individual IHE actor, refer to the appropriate test document.

5.1 Test Case 10701: PSA Simple Patient Switching

Test case 10701 covers the PSA process flow: Simple Patient Switching.

5.1.1 References

ITI TF-1: 6.3.1

5.1.2 Direct Actors

Patient Context Participant

Context Manager

5.1.3 Supporting Actors

None

Identifier	Description	Source	Destination

5.2 Test Case 10731: Join Context

Test case 10731 covers the PSA Join Context transaction.

5.2.1 References

ITI TF-2: 3.5

5.2.2 Direct Actors

Patient Context Participant

Context Manager

5.2.3 Supporting Actors

None

Identifier	Description	Source	Destination

5.3 Test Case 10732: Change Context

Test case 10732 covers the PSA Change Context transaction.

5.3.1 References

ITI TF-2: 3.6

5.3.2 Direct Actors

Patient Context Participant

Context Manager

5.3.3 Supporting Actors

None

Identifier	Description	Source	Destination

5.4 Test Case 10733: Leave Context

Test case 10733 covers the PSA Leave Context transaction.

5.4.1 References

ITI TF-2: 3.7

5.4.2 Direct Actors

Patient Context Participant

Context Manager

5.4.3 Supporting Actors

None

Identifier	Description	Source	Destination

5.5 Test Case 10734: Follow Context

Test case 10734 covers the PSA Leave Context transaction.

5.5.1 References

ITI TF-2: 3.13

5.5.2 Direct Actors

Patient Context Participant

Context Manager

5.5.3 Supporting Actors

None

Identifier	Description	Source	Destination

6 Test Cases: CT

This section describes test cases that are generally associated with the CT component. There may be some overlap with other profiles.

6.1 Test Case 10901: CT Manual Configuration

Test case 10901 covers manual configuration of NTP clients with a fixed IP address of the NTP server.

6.1.1 References

ITI TF-2: 3.1.4.1.2

6.1.2 Direct Actors

Time Client

Time Server

6.1.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.2 Test Case 10902: CT DHCP Configuration

Test case 10902 uses DHCP to obtain the NTP server address.

6.2.1 References

ITI TF-2: 3.1.4.1.2

6.2.2 Direct Actors

Time Client

Time Server

6.2.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.3 Test Case 10903: CT Automatic Configuration

Test case 10903 uses automatic discovery of the NTP server address.

6.3.1 References

ITI TF-2: 3.1.4.1.2

6.3.2 Direct Actors

Time Client

Time Server

6.3.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.4 Test Case 10911: CT NTP Test 1

Test case 10911 tests the CT profile using the NTP.

6.4.1 References

ITI TF-1: 3.1.4.1.2

RFC 1305

6.4.2 Direct Actors

Time Client

Time Server

6.4.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.5 Test Case 10912: CT NTP Test 2

Test case 10912 tests the CT profile using the NTP.

6.5.1 References

ITI TF-1: 3.1.4.1.2

RFC 1305

6.5.2 Direct Actors

Time Client

Time Server

6.5.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.6 Test Case 10913: CT SNTP Test 1

Test case 10913 tests the CT profile using the SNTP.

6.6.1 References

ITI TF-1: 3.1.4.1.2

RFC 2030

6.6.2 Direct Actors

Time Client

Time Server

6.6.3 Supporting Actors

None

Identifier	Description	Source	Destination

6.7 Test Case 10914: CT SNTP Test 2

Test case 10914 tests the CT profile using the SNTP.

6.7.1 References

ITI TF-1: 3.1.4.1.2

RFC 2030

6.7.2 Direct Actors

Time Client

Time Server

6.7.3 Supporting Actors

None

Identifier	Description	Source	Destination