
HIMSS and RSNA
Integrating the Healthcare Enterprise

IHE/MESA Time Client Tests

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Revision 9.0.0
20-September-2005

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1 Time Client Tests

1.1 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:

- Consistent Time

1.2 Patient Identification

There are no patients to identify in this test.

1.3 Configuration

1.4 Starting the MESA Servers

There are no MESA servers to test.

1.5 Installation Test

1.6 Submission of Results

Test descriptions below inform the reader to “submit results to the Project Manager”. This is does not mean “email”. The current submission process should be documented by the Project Manager, but will not include emailing files directly to the Project Manager.

2 Test Cases: CT

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

2.1 Test Case 10900: CT Time Synchronization Description

Time Client applications are expected to synchronize with a Time Server and to use that synchronized time in their messaging. This test requires the user to describe that synchronization.

2.1.1 References

ITI TF

2.1.2 Instructions

To run this test, follow these steps:

1. There is no software required to run this test.
2. Create a text file named <system>_10900.txt where <system> is the name of your system as found in the registration tools. That is, this should name your company and the system under test. Create a text file and not a Word document or other structured document.
3. Describe in 500 words or less how your applications use the time that is obtained from the time server. A simple format would include listing your output messages with lists of the fields that are filled with the synchronized time.
4. In the description, include the operating system used and the low level OS call to get the proper time.

2.1.3 Evaluation

1. Submit the text file created above to the Project Manager.

2.2 Test Case 10911: CT Time Synchronization NTP

Time synchronization requires an external system that serves as an NTP server. The MESA tools do not include such a server, but they are readily available.

If time permits, the Project Manager will load the time server software and allow access for participants. As of this version of the document, that is not available.

2.2.1 References

ITI TF

2.2.2 Instructions

To run this test, follow these steps:

1. Read about NTP at the site <http://www.ntp.org>
2. Select/locate a public NTP server. Follow any rules of etiquette posted for that server.

3. Configure your system to synchronize time with that public NTP server.
4. Use a web browser to find a web server that will display the current time. In the US, you can use www.time.gov. In other regions, if you cannot find a local server, use the US server and augment your results with the proper time difference.
5. Execute a “clock” program on your host system that shows the time on your system.
 - a. On a Windows system, this can be done by selecting the “time” in the lower right tray.
 - b. On a Unix system: `xclock -digital -update 1`
6. Perform a screen capture that shows both the web browser display and your system clock. These should show the same time (save for a time shift if not in the US).

2.2.3 Evaluation

1. Name the screen capture `<system>_10911.<ext>` where
system is the name of your system as found in the registration tools
ext is the proper file extension (JPG, etc.)
2. Submit the screen capture file created above to the Project Manager.