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**HIMSS and RSNA**  
**Integrating the Healthcare Enterprise**

**IHE/MESA Enterprise Report**  
**Repository Tests**

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 Enterprise Report Repository Tests

## 1.1 Introduction

External Report Repositories receive HL7 reports and render them for users. To test an Enterprise Report Repository, the MESA software sends sample reports to the repository. The owner of the repository should render the report and send a copy (email, fax, mail) to the Technical Project Manager.

### 1.1.1 Integration Profiles and Test Procedures

This document lists a number of tests for Enterprise Report Repository Systems. You may not be responsible for all of these tests.

Please refer to the Connectathon web tool to list the required tests for your system. The web address of this tool depends on the year and project manager. Please contact the appropriate project manager to obtain this information.

## 1.2 Message Attributes

These tests do not require the Enterprise Report Repository to produce messages with attributes that we test.

## 1.3 Message Values

These tests do not require the Enterprise Report Repository to produce messages with attributes that we test.

## 1.4 Configuration

The Enterprise Report Repository scripts described below use an ASCII configuration file to identify parameters such as host names and port numbers. The configuration file is named *enterprise\_repos\_test.cfg* and is included in the directory *\$MESA\_TARGET/ mesa\_tests/rad/actors/enterprise\_rpt\_repos*. Edit the file and change entries (host name, port number) which pertain to your system. Your system is identified by entries that begin with TEST.

Read the *Runtime Notes* section of the *Installation Guide* to determine the proper settings for the MESA runtime environment.

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## 1.5 Starting the MESA Servers

These instructions assume you are using a terminal emulator on Unix systems or an MS DOS command window under Windows NT. Each test uses a command line interface; there is no graphical user interface. Before you start the test procedure, you need to start the MESA Enterprise Report Repository. It receives a copy of the HL7 reports exported to your system. Make sure the appropriate database is running (PostgreSQL, SQL Server). To start the MESA servers:

1. Enter the External Report Repository exam folder:

*mesa\_tests/rad/actors/enterprise\_rpt\_repos*

2. Execute the appropriate script to start the servers:

*scripts/start\_mesa\_servers.csh* (Unix)

*scripts\start\_mesa\_servers.bat* (Windows)

When you are finished running one or more tests, you can stop the servers:

*scripts/stop\_mesa\_servers.csh* (Unix)

*scripts\stop\_mesa\_servers.bat* (Windows)

Log files are stored in *\$MESA\_TARGET/logs*.

## 1.6 Submission of Results

Test descriptions below inform the reader to “submit results to the Project Manager”. This 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 Individual Tests**

### **2.1 Enterprise Report Repository Test 1101: Simple Image Report**

This test generates a Simple Image and Numeric Report and transmits that report to your Enterprise Report Repository. This report has no references to images.

1. Start the MESA servers as described in section 1.5.
2. Run the script which generates the sample report and transmits that report to your system:  

```
perl 1101/1101_enterprise.pl
```
3. Render the report and send a copy to the Technical Project Manager.

### **2.2 Enterprise Report Repository Test 1102: Simple Image Report with Image Reference**

This test generates a Simple Image and Numeric Report with an image reference and transmits that report to your Enterprise Report Repository.

1. Start the MESA servers as described in section 1.5.
  2. Run the script which generates the sample report and transmits that report to your system:  

```
perl 1102/1102_enterprise.pl
```
  3. Render the report and send a copy to the Technical Project Manager.
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### 3 Individual Tests for Cardiology

#### 3.1 Test Case 20503: Receive HL7 Encapsulated Report (CARD-7)

Test 20503 tests the ability to receive an HL7 message with an encapsulated PDF report.

To run this test, follow these steps using a DOS window or terminal emulator:

1. Set the current directory to *\$MESA\_TARGET/ mesa\_tests/card/actors/enterprise\_rpt\_repos*.
2. Make sure the MESA servers have been started, if not run the following:

`scripts/start_mesa_servers.csh` (Unix)

`scripts\start_mesa_servers.bat` (Windows)

When you are finished running one or more tests, you can stop the servers:

`scripts/stop_mesa_servers.csh` (Unix)

`scripts\stop_mesa_servers.bat` (Windows)

3. Run the test script as follows:

`perl 20503/20503_enterprise.pl`

4. There is no evaluation script for the test. The vendor should create a word or pdf file using the document naming convention of: `CompanyName_Product_20503_ERR_2005.doc` . Using any vendor tool cut and paste in information from your own product which demonstrates that the report was successfully stored in your product. A query/retrieve screen snapshot of that report or a database report screen snapshot would be a good example. Submit this result to the Product Manager.