

APEL SSM Test Plan

EMI Component Description and Version

APEL SSM takes files written to a location on the host file system, and sends them to a receiving SSM via a configured STOMP queue.

This test plan is suitable for SSM version 2.1.0.

Installation and configuration

Follow the instructions from the EMI APEL SSM system administrator guide.

This plan must be followed both for running SSM as part of APEL client and for running SSM as a stand-alone program.

Unit Tests

Unit tests are available with the SSM source code.

Deployment Tests

None applicable.

Configuration Tests

- A missing destination option causes an error
- Incorrect certificate or key filenames or permissions are handled sensibly
- An incorrect server certificate is handled correctly
- If no brokers are found, SSM exits
- The logging options work correctly
- Incorrect LDAP connection details are handled correctly
- An incorrect output directory is handled correctly

System Tests

Basic Functionality Tests

Connections

- SSM connects to an operational broker
- SSM handles a broker which is down correctly
- SSM can connect to a broker via SSL

Crypto

- A receiving SSM receives and verifies messages correctly
- Encrypted messages are decrypted and verified

Messages

- Check that SSM finds messages in a valid location
- Check that receiving SSMs receive the full message contents

Regression Tests

- #101207 Sender should verify receiver's certificate before encrypting with it

Performance and Scalability Tests

No performance tests have been defined.

Standard Compliance and Conformance Tests

None applicable.

Inter-component Tests

APEL SSM must operate with the APEL client. This is covered in the APEL Client Test Plan.