EUROPEAN

MIDDLEWARE INITIATIVE

APEL SSM FUNCTIONAL DESCRIPTION

Document Version:	**1.0**
EMI Component Version:	**2.0.0**
Date:	**13.02.2013**

This work is co-funded by the European Commission as part of the EMI project under Grant Agreement INFSO-RI-261611.

DOCUMENT CHANGE LOG

Version	Date	Comment	Author
1.0	13/02/2013	Initial Version	Will Rogers

1. INTRODUCTION

1.1. PURPOSE

The SSM (Secure STOMP Messenger) is used to send messages between computers using the STOMP protocol. It acts as both a sender and a receiver; only the sending component is supported in EMI.

1.2. DEFINITIONS AND ACRONYMS

STOMP [1]: Text based messaging protocol supported by various message brokers

SSM: Secure STOMP Messenger – a simple program used to send files using STOMP

dirq [2], [3]: A messaging library used to store messages on a local filesystem

2. OVERALL DESCRIPTION

A sending SSM reads files from a local filesystem, and then sends them, using the configured message brokers, to the configured queue. A receiving SSM listens to the queue and writes the received messages to a filesystem at the receiving end.

Messages are signed using an X509 certificate at the sender's side, and may optionally be encrypted using the server's certificate. The receiver verifies the signature and decrypts if necessary.

The python-dirq library is used to store messages on the filesystem. Messages may be added to SSM either by writing them directly as files, or using the python [2] or Perl [3] dirq libraries.

3. ARCHITECTURE

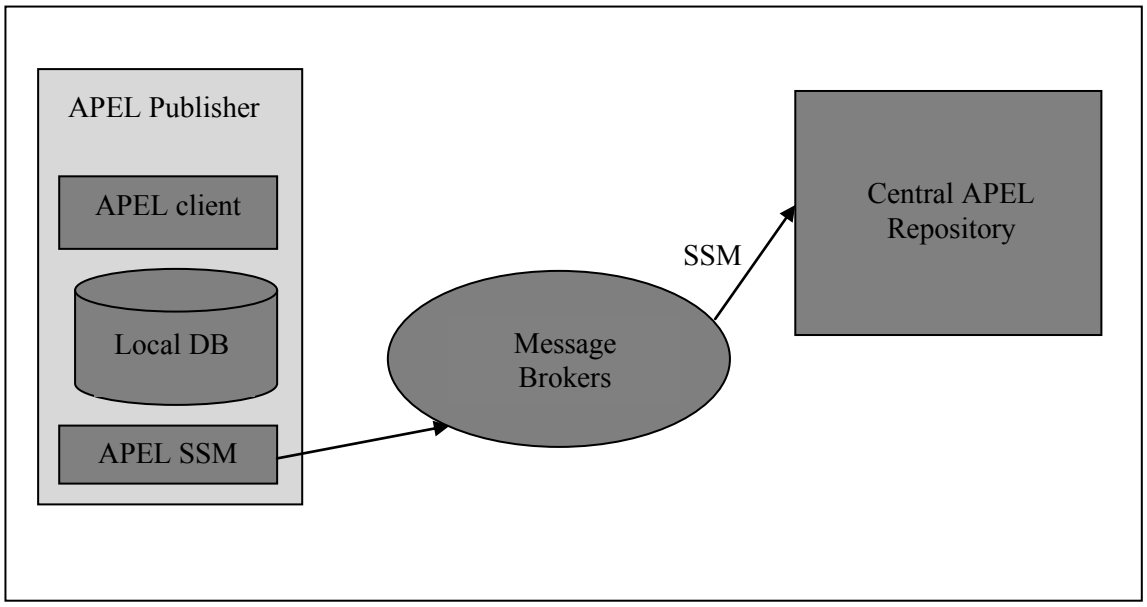

Figure 1: SSM and APEL Publisher

4. REFERENCES

[1] http://stomp.codehaus.org/

[2]: python-dirq: http://pypi.python.org/pypi/dirq

[3] Perl Directory::Queue: http://search.cpan.org/~lcons/Directory-Queue/