



Rhapsody/PHINMS Interoperability

Public Health Information Network Messaging System (PHINMS)

Version: 1.0

**Prepared by:
U.S. Department of Health & Human Services**

Date: November 2, 2007



EXECUTIVE SUMMARY

Public health involves many organizations throughout the PHIN (Public Health Information Network), working together to protect and advance the public's health. These organizations need to use the Internet to securely exchange sensitive data between varieties of different public health information systems. The exchange of data, also known as "messaging" is enabled through messages created using special file formats and a standard vocabulary. The exchange uses a common approach to security and encryption, methods for dealing with a variety of firewalls, and Internet protection schemes. The system provides a standard way for addressing and routing content, a standard and consistent way for information systems to confirm an exchange.

The PHINMS (Public Health Information Network Messaging System) is the software which makes this work. The system securely sends and receives sensitive data over the Internet to the public health information systems using Electronic Business Extensible Markup Language (ebXML) technology.

The Rhapsody/PHINMS Interoperability document provides a CDC statement of the tests performed.

ACRONYM LIST

| | |
|--------|--|
| CDC | Centers for Disease Control and Prevention |
| DMZ | De-Militarized Zone |
| ebXML | Electronic Business Extensible Markup Language |
| PHIN | Public Health Information Network |
| PHINMS | Public Health Information Network Messaging System |
| SP1 | Service Pack One |
| SSL | Secure Socket Layer |

1.0 RHAPSODY/PHINMS INTEROPERABILITY

The CDC has conducted interoperability tests with its PHINMS 2.7.00 SP1 application and the Orion Rhapsody ebXML (specially configured 2.4) application. The tests focused on the following:

- Rhapsody Sender transmitting data to a CDC PHINMS Receiver, and
- CDC PHINMS Sender transmitting data to a Rhapsody Receiver.

The Rhapsody Sender passed the above mentioned tests. The Rhapsody Sender will function in a Route-not-Read configuration as a Sender and a Sender/Poller. The CDC believes the Rhapsody Sender should interoperate with a PHINMS Receiver.

The Rhapsody Receiver does not support the following:

- Receiver-side proxy web servers with SSL transmissions,
- payloads greater than 20 MB,
- Synchronous Message Handlers, and
- functioning as a Route-not-Read Hub,

CDC recommends ebXML Receivers (like Rhapsody and PHINMS) should follow industry-standard best practices to place a Receiver behind a proxy web server which is hosted in the receiving organization's DMZ. This will protect the Receiver from viruses and denial of service attacks. Orion has informed the CDC a future release of its Rhapsody Receiver product will support SSL through a proxy web server.

The stability, robustness, error handling, logging, and performance of the Rhapsody Sender/Receiver were not tested by CDC.

Issues encountered when using the Rhapsody Sender/Receiver need to be addressed by Orion. CDC does not provide technical assistance in installing, configuring, or troubleshooting the Rhapsody Sender/Receiver.