



PHINMS 3.1 Release Notes

Public Health Information Network Messaging System (PHINMS)

Version 1.2

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REVISION HISTORY

Version #	Implementer	Date	Explanation
1.0	Joseph Mai	05-24-2017	Create 3.0 Release Notes
1.0	Charlie Peng	05-30-2017	Edit section 3.1
1.0	Jannie Williams	08-15-2017	Updates
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ACRONYMS

AJP	Apache JServ Protocol
CA	Certificate Authority
CDC	Centers for Disease Control and Prevention
CPA	Collaboration Protocol Agreement
DN	Distinguished Name
DSN	Data Source Name
GA	General Availability
GUI	Graphical User Interface
HSQL	HyperXtreme Structured Query Language
HSQLDB	HyperXtreme Structured Query Language Database
HTTP	Hyper Text Transfer Protocol
JBDC	Java Database Connectivity
JDK	Java Development Kit
JVM	Java Virtual Memory
LDAP	Lightweight Directory Access Protocol
ODBC	Open Database Connectivity
PHINMS	Public Health Information Network Messaging System
SP1	Service Pack 1
SQL	Structured Query Language
SMTP	Simple Mail Transport Protocol
SSL	Secure Socket Layer
TransportQ	Transport Queue
URL	Uniform Resource Locator
WAR	Web Archive
XML	Extensible Markup Language

1 INTRODUCTION

1.1 Objective

The Centers for Disease Control and Prevention (CDC) Public Health Information Network Messaging System (PHINMS) Release Notes communicates the changes and enhancements in PHINMS Version 3.1 software for Windows environments. It also documents known problems and workarounds. This document is for users, developers, and IT support staff.

Note: Navigate to www.cdc.gov/phinf/phinms when this manual references the PHINMS website.

1.2 Scope

This document describes new features and bug fixes implemented with PHINMS Release 3.1 and the supported upgrade path.

1.3 References

Name	Location
Quick How To	Located at https://www.cdc.gov/phinf/tools/phinms/
PHINMS Implementation Guide Version 3.1	Steps to install, upgrade, and configure PHINMS 3.1 are located at https://www.cdc.gov/phinf/tools/phinms/quick-tips.html#18

1.4 Communication with Users

Send questions, suggestions, and/or comments concerning PHINMS support or documentation to the PHINMS website by using the **Contact Us** email link located at the bottom of the page. The PHINMS team responds to users' communications.

2 RELEASE INFORMATION

The PHINMS 3.1 release supports clean installations and upgrades from 2.8.00 to 3.1. PHINMS 3.1 includes Java 7 updates and Tomcat 8 updates.

2.1 Compatible Products

This product has been tested on the following platforms with the following requirements:

- Operating systems:
 - Windows 2003, 2008 Server (Standard and Enterprise) 32 and 64 bit
 - Windows 7
- Certified Databases:
 - Default Databases - used for testing purposes:
 - HSQL DB 1.8.0.4
 - Production Qualified Databases:
 - Microsoft SQL Server 2005 to 2016
 - Oracle 11g Release 1
- Application Servers:
 - Tomcat 8
- Receiver Side Proxy Servers:
 - IIS 7.0 with Jakarta Tomcat Connector
- JDBC drivers.

DB Type	DB Version	JDBC Driver Name	Type	Version	Date Published
MS SQL	2005	sqljdbc.jar	4	1.2.2828	10/11/2007
MS SQL	2008	sqljdbc4.jar	4	2.0.1803	03/25/2009
Oracle	11g Rel 1	ojdbc6.jar	4	11.1.0.7.0	08/28/2008

Table 1. JDBC Drivers

Note: PHINMS has tested certain JDBC drivers to connect to the supported databases and found no issues based on the tests performed. PHINMS does not guarantee nor support these JDBC driver versions. It is the responsibility of the PHINMS user to decide which JDBC driver to use. The table above is provided for reference purposes only.

2.2 Resource Requirements

- Local administrator for Windows
- Minimum disk space: 1024 MB
- Minimum memory: 2048 MB
- TLS 1.2
- Java JDK 7

2.3 New Installations

The Installation Wizard guides the user through the base installation of the PHINMS Sender and/or Receiver. It is the responsibility of the administrator to configure routes and database connections after completing the installation. The following major components are installed with the wizard:

- Tomcat 8 server
- JDK 1.7 --- user must install JDK prior to installing PHINMS
- PHINMS 3.1 Receiver and Sender web applications
- PHINMS 3.1 default configuration files and directory structure
- PHINMS Remote administration console (if chosen during the installation)
- Default database: Windows: HSQLDB 1.8.0.4 engine.

When PHINMS software is installed, Tomcat 8 will be installed in the Windows services panel with the display name of “PHINMS Tomcat Instance” and HSQLDB with “PHINMS Database Engine Service.”

When installed as a Windows service, the default startup type is configured as “Automatic.”

The alternative way to start the PHINMS instance is as follows:

- `<Install-dir>\Phinms\bin\startHSQLDB.bat` to start the PHINMS default database (HSQLDB) for sender or receiver.

When the Tomcat server is running, the console can run by doing either of the following:

- Selecting “PHINMS Console” from the “Program Menu” or
- Double clicking `<installation directory>\bin\phinmsConsole.exe` file.

The PHINMS console is protected by a username and password by default. Contact the PHINMS Help Desk by email at phintech@cdc.gov or by calling 1-800-532-9929. Use option 2 for the default console username and password and then change the default password.

2.4 Upgrade from Prior Versions of PHINMS

PHINMS 3.1 supports upgrading from PHINMS versions 2.8.00 or later. End users must provide the previous installation path during upgrade as well as a new path for installing the newer version. Upgrading from versions prior to PHINMS 2.8.00 is not supported. End users must do a new install to take advantage of the fixes and enhancements in PHINMS 3.1.

2.5 Re-installing PHINMS

PHINMS does not support re-installing PHINMS to the same install directory. The administrator must choose new install and a new install path from the wizard.

3 PHINMS 3.1 CHANGES

The new features included in PHINMS 3.1 are listed in this section. More details about many of these features will be documented in the PHINMS 3.0 Implementation Guide.

3.1 Update to TLS 1.2

The major upgrade of PHINMS 3.1 is the ability to use TLS 1.2. TLS 1.0 has posed many security vulnerabilities, and, for that reason, CDC has mandated that the PHINMS application disable TLS 1.0. Messages sent through the PHINMS 3.1 sender will only be through TLS 1.2. CDC has already configured PHINMS 3.1 receivers and routers to receive PHINMS 3.1 messages with TLS 1.2. Other public health organizations will need to upgrade receivers and routers to PHINMS 3.1 with TLS 1.2 enabled before receiving and routing messages from PHINMS 3.1 senders.

Because it is not possible to have all public health partners upgrade to PHINMS 3.1 senders at the same time, PHINMS 3.1 receivers and routers can enable both TLS 1.0 and TLS 1.2 during the interim period so that they can receive PHINMS 3.1 messages as well as messages sent from previous versions.

CDC will set a date to phase out pre-PHINMS 3.1 senders by disabling TLS 1.0 on CDC's PHINMS 3.2 receivers and routers. After that date, only PHINMS 3.1 senders will be able to send messages to CDC through TLS 1.2 protocol.

3.2 Update Bundled Tomcat Server

The PHINMS Java application uses Tomcat as a web server engine. This release of PHINMS was updated to Tomcat Version 8 so that customers are receiving the latest security updates released by Tomcat.

3.3 Update Bundled Java Virtual Machine

The PHINMS application (as with all Java applications) requires a Java Runtime Environment (JRE) to execute on Windows and Linux. This release of PHINMS was updated to JRE Version 1.7.0_79 so that customers are receiving the latest security updates released by Oracle.

3.4 PHINMS 3.0 Bug Fix

PHINMS 3.0 Console has a bug in JDBC connection to the SQL Server database.

4 PHINMS KNOWN ISSUES

The following are either known product bugs that are not yet addressed or limitations of the product that will be considered.

4.1 PHINMS 3.1 Limitations

- While users select database type for TransportQ and WorkerQ, one of the drop-down list options indicates “Access.” The MS Access database is not supported in PHINMS Versions 2.8 to 3.1. Please choose the other database types from the list. This option will be removed in a future release.
- In the scenario in which a receiver-side service/action pair is configured to store “payload to disk,” sometimes encrypted data are stored directly to the <INSTALL-DIR>\shared\ folder instead of <INSTALL-DIR>\shared\receiverincoming folder.
- When uninstalling the PHINMS software, after the progress bar says “Finished,” click the Quit button to exit the process.
- When the auto-delete functionality is first turned on to delete older data, PHINMS waits until the start of the next cycle before any actual deletion occurs. This function is not a real-time deletion capability.
- When a PHINMS Sender is installed for the first time, the sender’s log file indicates that the preconfigured sender's keyfile cert.pfx does not exist. This error can be ignored.
- When the sent and received messages are deleted from inside the console, the deletion is not immediately reflected in the console until the refresh button is clicked.
- PHINMS Console Tray Icon will not close when the Tomcat service is stopped.
- Remote Admin console using a browser is limited to updating service/action pairs.
- The ebXML Digital Signature (“signed acknowledge”) feature does not work in this release.
- Some of the PHINMS 2.8.01 SP1 console fields have validations. Validations for all fields will be in a future release.
- Chunking (sending payloads larger than approximately 10 MB) only works with direct send and does not work with route not read (RnR). If an end user needs to use chunking and needs to send/poll RnR messages, then two instances of a PHINMS Sender will be required: one instance for direct-send with chunking turned on, and the other PHINMS Sender for RnR messages with chunking turned off.
- The receiver logs encrypted messages in the **\install directory\logs\receiver** directory and generates log files for unencrypted messages in the **\install directory\logs** directory. This anomaly is known and will be fixed in a future release.

4.2 Additional Information and Recommendations

- The receiver does not append the timestamp in the file name for the zero payload messages.
- When chunked messages are received, some chunks may have a zero size payload. This result is not a concern, as the receiver assembles all chunked messages after it receives the last chunked message.
- Default JDBC parameters are set for MS SQL Server to be SQL Server 2005/2008.
- As with prior releases, PHINMS 3.1 does not have MS SQL Server, Oracle, and MySQL JDBC drivers (JDBC jar files) bundled with the release. End users using any of those databases as a transport queue or worker queue need to download those drivers from the related vendor and import them by using PHINMS Console.
- Before starting the process of upgrading from a prior PHINMS release, users must first stop any running PHINMS application before it is upgraded. If existing PHINMS software is running as a Windows Service, end users should stop the service; otherwise, stop the PHINMS software from the command window if it is running in command line mode.

Contact the PHINMS Support Team when a bug or limitation is found. Navigate to <https://www.cdc.gov/phn/tools/phinms/> and click on the Contact PHINMS email link or contact the CDC PHIN Help Desk at PHINtech@cdc.gov.

5 FILES LIST

This release consists of the files in the table below.

Filename	Description
PHINMS_3.1.0_tls12_sqlfix.exe	Installation file on Windows 7/8/10, Windows Server 2003/2008/2012 64 bit OS requires 64 bit version of Java installed

Table 2. Release File