

Using the Public Health Information Network

# Message Queue Monitor



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## *Help Desk*

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For more help using the Message Queue Monitor please call the Help Desk.

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**1 (800) 532-9929 option 2**

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## About the Message Queue Monitor

The Message Queue Monitor, displayed below, provides the tools you need to work with your client's messages. Using the Message Queue Monitor you can resend, delete and troubleshoot failed messages.

The screenshot shows the Message Queue Monitor application window. The interface includes a menu bar at the top, a toolbar with icons for file operations, and a status bar at the bottom. The main area is divided into a transport status bar, a message list panel, and a message detail panel.

**Process Status Bar:** Shows overall statistics: Queued: 29, Attempted: 21, Sent: 3, Received: 3, Done: 70.

**Transport Status Bar:** Shows counts for Failure: 21 and Success: 50.

**Message List Panel:** A table listing messages with columns for Record ID, Filename, Service, Action, Route Info, Process Status, Recipient, and Transport Status.

Record ID	Filename	Service	Action	Route Info	Process Status	Recipient	Transport Status
87	test.txt	VTEST	put	CDC	done		failure
88	test.txt	VTEST	put	CDC	attempted		-
89	test.txt	VTEST	put	CDC	done		success
90	test.txt	VTEST	put	CDC	done		success
91	test.txt	VTEST	put	CDC	done		success
92	test.txt	VTEST	put	CDC	done		success

**Message Detail Panel:** Provides detailed information for the selected record (Record ID: 88).

```

Record ID: 88
Message ID: 88
Payload Filename: test.txt
Destination Filename: test.txt
Route Info: CDC
Service: VTEST
Action: put
Arguments: asdf
Recipient:
Creation Time: --
Encryption: yes
Signature: yes
Public Key LDAP Address: directory.verisign.com
Public Key LDAP BaseDN: o=Centers for Disease Control and Prevention
Public Key LDAP DN: cn=nndm user
Processing Status: attempted
Transport Status: --
Transport Error Code: --
Application Status: not-set
Application Error Code: --
Application Response: --
Sent Time: 2002-12-27T14:34:20
    
```

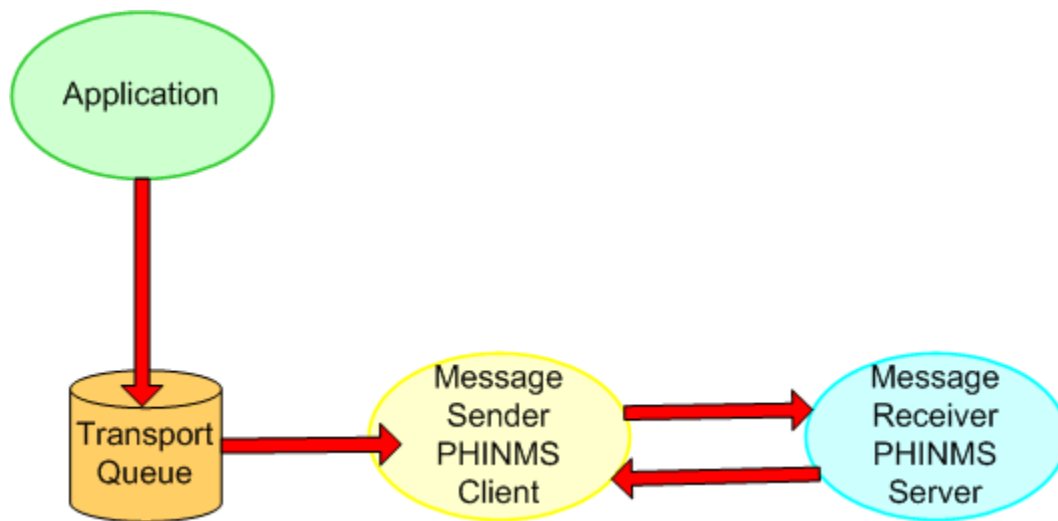
## Understanding Messages

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The Public Health Information Network, PHIN, is an electronic network that supports the monitoring and maintaining of the nation's public health. It is a single-information network that integrates, both functionally and organizationally, public health partners across the nation. The network is envisioned to support not only biological terrorism detection and response, but routine disease surveillance as well. It will also provide a platform on which to build future IT systems.

To support this vision, interoperability on many levels is paramount. PHIN has adopted a set of industry standards for vocabulary, message syntax, and message transport, among others. The Public Health Information Network Messaging System is a specific instance of the ebXML version 2.0 Standard Message Service Handler for message transport as adopted by the PHIN standards. The messages you send and monitor using the Message Queue Monitor contain vital public health information.

### Message Lifecycle



The application that writes the message sends the message to a **transport queue**, where it waits for the message sender, the client, to pick it up. The transport queue is part of the message sender. You can see the messages in the transport queue using the Message Queue Monitor.

When the messages arrive at the transport queue they have a **queued** process status.

After arriving at the transport queue, the message is prepared by attaching the message receiver's address along with other information. During this process, the message has an **attempted** process status.

When the message leaves the message sender and is on its way to the message receiver, the message has a **sent** process status.

After the message reaches the message receiver, the server, the message receiver sends an acknowledgement back to the message sender. The acknowledgement tells the message sender whether the message was a transport **success** or a transport **failure**. When the message sender receives the acknowledgement, the message has a **done** process status.

### Message List Panel

The **Message List Panel** displays some of the fields within the message. You can rearrange the columns of fields by clicking on the field name and moving the column. To move the list up or down, use the scroll bar on the right.

Record ID	Filename	Service	Action	Route Info	Process Status	Recipient	Transport Status
87	VTEST	put	CDC	done	failure		
88	VTEST	put	CDC	attempted	—		
89	VTEST	put	CDC	done	success		
90	VTEST	put	CDC	done	success		
91	VTEST	put	CDC	done	success		
92	VTEST	put	CDC	done	success		

Scroll Bar

The following table lists and describes the fields in the **Message List Panel**:

Field Name	Description
Record ID	This unique number identifies the message. It is different from the message ID. The record ID is created by the Message Sender and the number remains constant regardless of the status of the message. The message ID is created by the application that initially created the message and it may change during the lifecycle of the message.
Filename	The name of the file being sent by the outgoing message.
Service/Action	Message destination. Together, the Service and Action fields represent a specific business process or a specific destination queue on the receiver.
Route Info	Field in the transport queue, which describes a network link from a sender to a receiver. For example, a laboratory may have one <b>Route Info</b> that describes the network link from the laboratory to the Centers for Disease Control and Prevention and another <b>RouteInfo</b> that describes a network link from the laboratory to a State's health department.  To create a <b>Route Info</b> , the sender and receiver must have a

Field Name	Description
	Collaboration Protocol Agreement, <b>CPA</b> , a specification designed to ensure that the sender and receiver can exchange electronic data even when they use software from different vendors.
Process Status	The current status of the message: (in order) <b>queued</b> , <b>attempted</b> , <b>sent</b> , and <b>done</b> .
Recipient	This field is used only when the route-not-read architecture is used.
Transport Status	After the message is done (meaning, fully processed) it is either a transport <b>success</b> – the receiver received the message with no errors or a transport <b>failure</b> – the receiver did not receive the message or it received it with errors.

## Troubleshooting Messages

Use the **Message Detail Panel** and the **Message Log** to troubleshoot messages.

### To Use the Message Detail Panel

To use the **Message Detail Panel**, do the following:

1. Use the **Filter Database Records** icon to find the message for which you want to see the details.
2. From the **Message List Panel**, click on the message you want.  
The selected message changes to a blue color and its details are listed in the **Message Detail Panel** as shown below.
3. The **Transport Status** is **failure**. Try to resend the message using the **ReSend** icon. If the message fails again, contact your network administrators and ask them to contact the administrator for the message receiver listed in the **RouteInfo** field.

The screenshot shows the Message Queue Monitor application window. The interface includes a menu bar (File), a toolbar with icons for Filter Database Records, Message List, ReSend, and other functions, and a main display area. The main display area is divided into a summary section and a table of messages.

**Process Status Count:** Queued: 29    Attempted: 21    Sent: 3    Received: 3    Done: 70

**Transport Status Count:** Failure: 21    Success: 50    Other: 55

Record ID	Filename	Service	Action	Route Info	Process Status	Recipient	Transport Status
87	test.bt	VTEST	put	CDC	done		failure
88	test.bt	VTEST	put	CDC	attempted		--
89	test.bt	VTEST	put	CDC	done		success
90	test.bt	VTEST	put	CDC	done		success
91	test.bt	VTEST	put	CDC	done		success
92	test.bt	VTEST	put	CDC	done		success

The detailed view for Record ID 87 shows the following information:

**Message ID:** 87  
**Payload Filename:** test.txt  
**Destination Filename:** test.txt  
**Route Info:** CDC  
**Service:** VTEST  
**Action:** put  
**Arguments:** asdf  
**Recipient:**  
**Creation Time:** --  
**Encryption:** yes  
**Signature:** yes  
**Public Key LDAP Address:** directory.verisign.com  
**Public Key LDAP BaseDN:** o=Centers for Disease Control and Prevention  
**Public Key LDAP DN:** cn=nndm user  
**Processing Status:** done  
**Transport Status:** failure  
**Transport Error Code:** DeliveryFailure  
**Application Status:** InsertFailure  
**Application Error Code:** DeliveryFailure  
**Application Response:** none  
**Sent Time:** 2002-12-27T14:33:56  
**Received Time:** 2002-12-27T14:34:10



## To Use the Message Log

Use the Message Log to troubleshoot messages. The Message Log lists the time and the activity of the messages in the transport queue. To use the **Message Log** do the following:

1. From the menu bar select **File > View Log** or click the **View Log** icon on the toolbar.

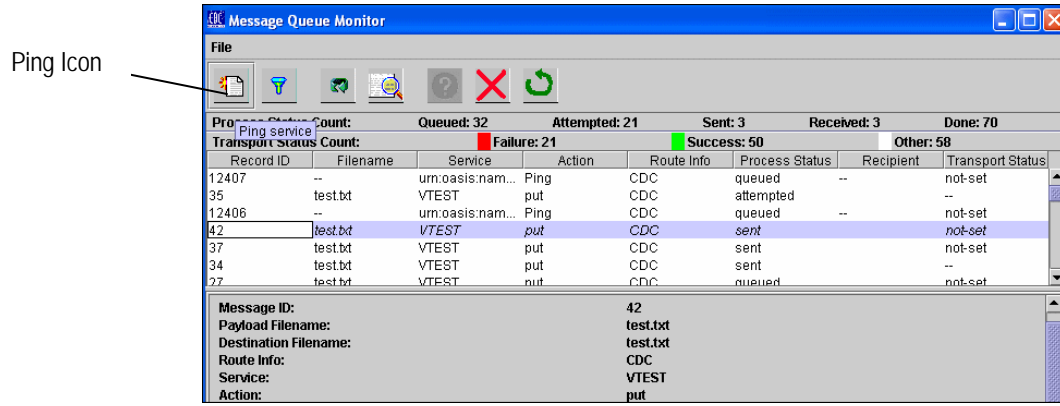
The **Message Log** opens as shown below. You are not expected to be familiar with all of the contents of the log. When you experience difficulty resending messages, you should show the log to the network administrator or copy and paste it and e-mail it to the help desk.

Following is a sample of the Message Log:

```
Starting CDC PHIN-MS Version 2.1 [Release: 2003.05.01, Build 20030515]
Thread ID: 144
144|8/1|10:16:21|Collecting TrustStore Parameters| 8/1|10:16:21|Done
144|collecting TrustStore Parameters| 8/1|10:16:21|Collecting KeyStore
144|Parameters| 8/1|10:16:21|Done collecting KeyStore Parameters|
144|8/1|10:16:21|Loading decryption keystore|
unknown attr1.3.6.1.4.1.311.17.1
144|8/1|10:16:26|Collecting Database Authentication Parameters|
144|8/1|10:16:26|Done collecting Database Authentication Parameters|
144|8/1|10:16:26|Initializing requeue cachepath from
144|d:\projects\phinms21int\ebxm 8/1|10:16:27|Spawning database
144|poller...| 8/1|10:16:27|Connection established|
8/1|10:16:27|Waiting
144|for records ...| 8/1|10:16:28|Reading record: 29257|
144|8/1|10:16:28|Setting payload file
to:d:\projects\phinms21int\ebxmlvob\outgoi
144|8/1|10:16:28|Warning: Record:transportStatus unspecified|
144|8/1|10:16:28|Warning: Record:transportError unspecified|
144|8/1|10:16:28|Warning: Record:applicationError unspecified|
144|8/1|10:16:28|Warning: Record:applicationResponse unspecified|
144|8/1|10:16:28|Warning: Record:responseMessageId unspecified|
144|8/1|10:16:28|Warning: Record:responseArguments unspecified|
144|8/1|10:16:28|Warning: Record:responseLocalFile unspecified|
144|8/1|10:16:28|Warning: Record:responseFilename unspecified|
144|8/1|10:16:28|Warning: Record:responseMessageOrigin unspecified|
144|8/1|10:16:28|Warning: Record:responseMessageSignature unspecified|
144|8/1|10:16:28|----- Start Processing record : ID=29257, Priority=1
-----|
144|8/1|10:16:28|Processing route: CDC|
144|8/1|10:16:28|Reading CPA file:
d:\projects\phinms21int\ebxmlvob\config\CPA\
144|8/1|10:16:28|host=phmsg.cdc.gov, port=80soap
action=/evalebxml/receivefile|
```

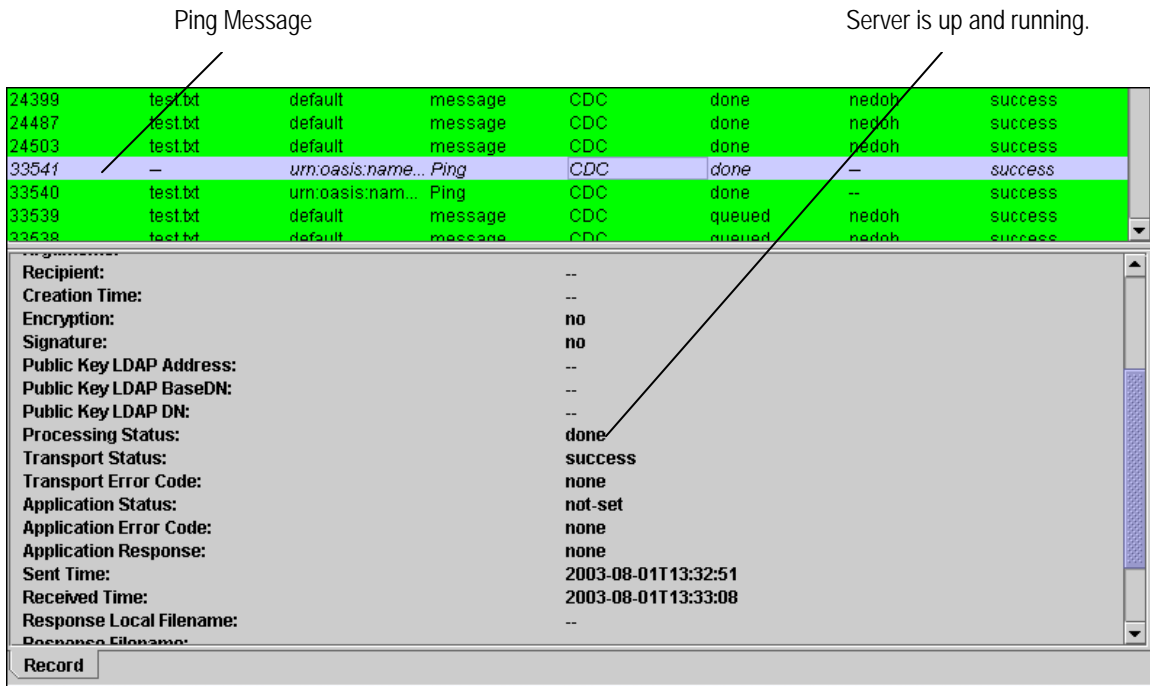
## Pinging the Server

If you have a range of messages that are failures, the server may be down. To check the server, you can “ping” it. A ping is program used to test whether a particular network destination is online, by sending a request and waiting for a response.



## To Ping the Server

- From the menu bar select **File > Ping** or click the **Ping Service** icon on the toolbar. If the server is up and running the Ping message will have a **Done Process** status and a **Success Transport** status.



## Searching for Messages Using the Database Filter

Use the **Database Filter** to quickly find messages you want to view, resend, or delete.

When you select the **None** option, you will receive all messages.

The screenshot shows the 'Database Filter' dialog box with the following settings:

- Radio buttons:  None,  Sent,  Received
- From: 6/27/03 11:04 AM
- To: 6/27/03 11:04 AM
- Transport section:
  - Success
  - Failure
- Process section:
  - Queued
  - Attempted
  - Sent
  - Received
- Buttons: Ok, Cancel

### To Search for All Messages

To search for all messages, do the following:

1. From the menu bar select **File > Filter** or click the **Filter Database Records** icon on the toolbar.  
The **Database Filter** dialog opens.
2. Select **None** – meaning, you want to use none of the other filter options.
3. Click **OK**.  
All of the messages in the database appear in the Message List panel.

### To Search by Date and Time

You can search for messages by the date and time they were sent to the receiver (the received option is no longer relevant.)

1. From the menu bar select **File > Filter** or click the **Filter Database Records** icon on the toolbar.  
The **Database Filter** dialog opens.

2. Select **Sent**.
3. In the **From** and **To** spin boxes, select the date and time or range of dates and times by doing the following:
  - Click the **Up** or **Down Arrow** to change the date.
  - To change the time, select the time and then type the new time. Make sure to include a space between the date and time, a colon ( : ) to separate the hours and minutes, and include a space between the time and the AM or PM. Do not use periods in AM or PM.
4. Click **OK**.

The messages that were sent or received within the times you indicated appear in the Message List panel of the Message Queue Monitor.

### ***To Search by Status***

You can search for messages by their Transport or Process status. To search for messages by status, do the following:

1. From the menu bar, select **File > Filter** or click the **Filter Database Record** icon on the toolbar.

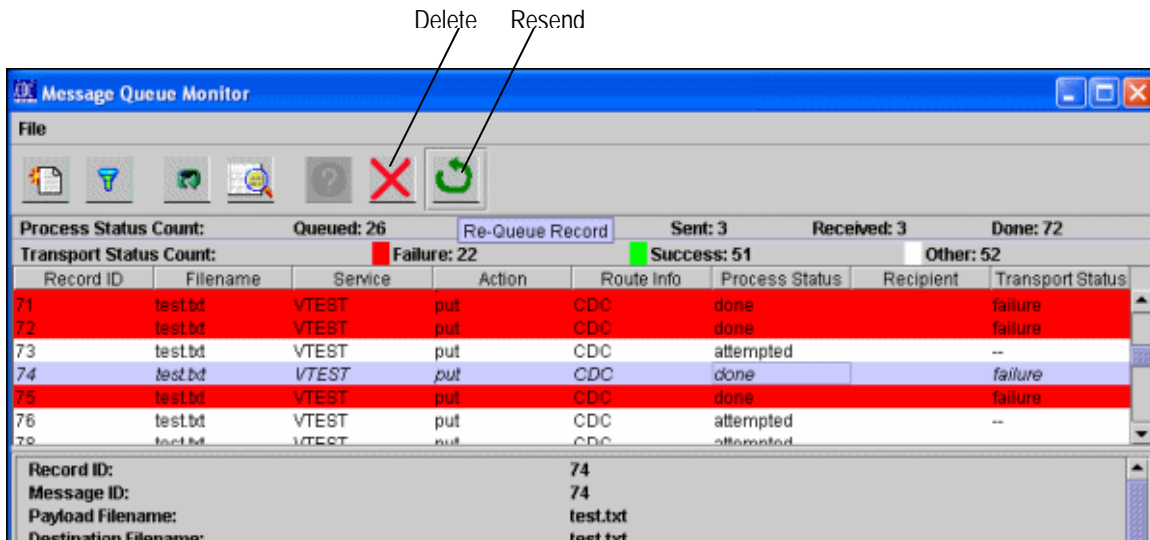
The **Database Filter** dialog opens.
2. To search for messages by **Transport** status, in the Transport area, select the **Success** or **Failure** check boxes or both.

To search for messages by **Process** status, in the **Process** area, select one or more of the **Process** status check boxes. (The **Received** status is no longer relevant).
3. Click **OK**.

The messages, which have the process or transport status you indicated, appear in the Message List panel of the Message Queue Monitor.

## Re-Sending and Deleting Messages

Use the **Re-Queue** feature to re-send messages and use the **Delete** feature to remove messages. The **Re-Queue** feature puts your message back into the message queue where it will be picked up and resent. The **Delete** feature permanently removes the message. After deleting a message, you can no longer view or resend it.



### To Re-Send Messages

To re-send messages, do the following:

1. Use the **Database Filter** to find the messages you want to resend.
2. From the **Message List** panel, select the message you want to resend.
3. From the menu bar, select **File > Re-Queue** or click the **Re-Queue Record** icon on the toolbar.

A message appears: **Are you sure you want to change the processing status of the selected record(s)?**

4. Click **Yes**.  
The message is moved to the queue and will be resent.

### To Delete Messages

To maintain the system, you need to routinely delete messages from the transport queue. To delete messages, do the following:

1. Use the **Database Filter** to find the messages you want to delete.
2. From the **Message List** panel, select the message you want to delete.

3. From the menu bar, select **File > Delete** or click the **Delete Record** icon on the toolbar.  
A message appears: **Are you sure you want to delete the selected record(s)?**
4. Click **Yes**.  
The message is permanently removed from the database.