

Quest® MessageStats® 7.6  
**Administrator Guide**



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**Legend**

-  **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
  
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
  
-  **IMPORTANT NOTE, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

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# Introducing MessageStats

- [What is MessageStats?](#)
- [The MessageStats Components](#)
- [MessageStats Process Overview](#)
- [Example: Creating an Initial Task for an Exchange Environment](#)

## What is MessageStats?

Quest MessageStats provides comprehensive reporting and analysis for key messaging platforms such as Microsoft Exchange, Lotus and IBM Notes, and Microsoft Lync and Skype for Business services.

MessageStats reporting offers critical metrics for messaging resource usage. Detailed information for examining mail activity and mail flow allows you to track capacity and improper usage.

Reports provide graphs for highlighting trends and exceptions, offer export options to many file formats, and support scheduled report distribution. A flexible web-based reporting engine allows you to view and to package the information in many different ways.

## Minimizes Impact on Network Performance

To gather information from wide-ranging messaging platforms, MessageStats provides a dynamic task-based gathering engine so that the collection of information can be intelligently scheduled, minimizing the impact to the messaging platform and corporate network.

In addition, you can horizontally scale out the gathering processors so that MessageStats can gather efficiently from remote messaging environments.

An intelligent multiprocessor approach ensures that large volumes of data can be copied quickly and reliably. This approach ensures that reports are available and current. You can configure MessageStats in a touchless manner that requires no agents on your communications servers.

## Flexible Reporting Options

MessageStats provides a flexible web-based reporting engine that allows all interested individuals to view messaging information. You can view all reports by accessing the web site directly, by signing up for automated subscriptions that can be sent to any email address, or by exporting to a file, using one of several supported formats.



# The MessageStats Components

MessageStats is comprised of the following components, which perform different functions:

- [MessageStats Server](#)
- [MessageStats Database](#)
- [MessageStats Reports](#)

## MessageStats Server

The MessageStats Server consists of the following components:

- a Microsoft Management Console (MMC) client console
- a scheduler service (MessageStats Scheduler Service)
- task processors (Task Execution Servers)

## MessageStats Console

The MessageStats Console is a Microsoft Management Console (MMC) snap-in that is used to administer MessageStats. You can create and schedule gathering tasks, and review gathering progress.

## MessageStats Scheduler Service

The MessageStats Scheduler Service coordinates the gatherings performed by the MessageStats Task Execution Servers. There can only be one MessageStats Scheduler Service per MessageStats database.

## Task Execution Servers

MessageStats task processors collect and process messaging information from messaging environments such as Microsoft Exchange.

The computer on which the processors are installed is called the Task Execution Server. You can install task processors on the same server as the MessageStats Scheduler Service and MMC console. You can also install task processors on a separate computer.

## MessageStats Database

MessageStats stores the information in a centralized SQL database, which provides the content for web-based reports.

## MessageStats Reports

MessageStats Reports provide summary and detailed information that includes critical metrics for resource usage, capacity, storage use, quotas, delivery times, distribution groups, public folders, and migration preparedness.

# MessageStats Process Overview

To start using MessageStats, you typically perform the following steps:

- 1 Connect to the Exchange environment from which you want to gather information.
- 2 Create and run a Default Gathering task to gather basic information about the messaging environment.

The gathered information is stored in the MessageStats SQL database.

- 3 View the data in the reports on the MessageStats Reports web server.
- 4 Schedule a recurring instance of the Default Gathering task.
- 5 Create and schedule additional tasks to gather additional information not collected by the default gathering task, such as public folder information or content details for specific mailboxes.
- 6 Set up and schedule report subscriptions for the reports that you want to email or publish on a regular basis.
- 7 Create custom reports as needed.

## 1. Connecting to the Messaging Environment

You create a connection to the messaging environment from which you want to gather data. For more information see [Creating a Connection to Exchange](#) on page 25.

## 2. Create and Run a Default Gathering Task

You create an initial gathering task, using the Create Task wizard and the defined task templates. Usually you create a task using the Default Gathering template to gather core messaging information. For more information, see [About the Exchange Default Gathering Task](#) on page 36.

Before you gather information from Exchange, ensure that the server from which you want to gather data is configured correctly. For information about Exchange-specific prerequisites and configuration, see the *MessageStats Quick Start Guide*.

### Gathered Information is Stored in the MessageStats Database

The task processors store the collected data in the MessageStats database, which is hosted on a SQL Server:

- For evaluation and test purposes, SQL Server Express can be used.
- For production implementations, full SQL Server must be used.

For more information about minimum requirements and rights and permissions needed for the database, see the *MessageStats Quick Start Guide*.

## 3. View Data in the Reports

When you have completed an initial gathering, you can view reports based on the gathered information using the web-based reporting component called MessageStats Reports.

MessageStats Reports provides a collection of preconfigured reports that let you to view data across multiple levels of your communications environment. You can change relevant report parameters immediately using Quick Filters or use the Report Wizard to create customized reports based on any data available in your MessageStats database.

For information about MessageStats Reports, see the *MessageStats Reports User Guide*.

## 4. Create Additional Gathering Tasks

Create, using different task templates, additional tasks to gather information not collected by the default gathering task. Schedule the tasks to run at recurring intervals. For more information, see [Extending Gathering Tasks](#) on page 44.

## 5. Create Report Subscriptions

You can create and schedule report subscriptions. Report subscriptions can embed a link to a report location in an email message, embed the report in an email, or send a message with an attachment that contains the report. Subscriptions can also automatically publish a report to a file share, to an FTP site, or to a web site.

## 6. Create Custom Reports

You can create custom reports using the Web Report Wizard. You can build your own reports based on existing data sources. You can select fields, filters, format, grouping, and sorting options. Custom reports can be edited, depending on your security permissions within MessageStats Reports. For information about creating custom reports, see the MessageStats Reports User Guide.

# Example: Creating an Initial Task for an Exchange Environment

For example, for a Microsoft Exchange environment, you would do the following steps to perform your first successful gathering:

Table 1. Example of initial workflow.

Step	Description
Connect to an Organization	1 Select the <b>Exchange Organizations</b> node in the treeview, right-click and select <b>Connect</b> .
	2 Select all the types of Exchange mailbox servers that are in the organization.
	3 Specify the server needed to connect to the organization. <b>NOTE:</b> For Exchange 2010 and Exchange 2013, the server must be a Client Access Server (CAS) and you must also specify a mailbox to which the task credentials have full access. For Exchange 2016 or Exchange 2019, the server must have the Mailbox role. <b>NOTE:</b> For Exchange 2013, the CAS server must have an SSL certificate on it that is trusted by the Task Execution Server.
Create an Initial Task	1 Expand the <b>Exchange Organizations</b> node.
	2 Right-click the Exchange organization and select <b>Create Task</b> .
	3 You should carefully consider the volume of information being gathered in large Exchange organizations when you create your initial task.
	4 Select <b>Default Gathering</b> from the list, enter a name for the task, and click <b>Next</b> .
	5 Step through the Task Creation Wizard, clicking <b>Next</b> at each page.
	6 View the gathering progress by expanding the <b>Tasks</b> node and browsing to the task you named in step 3.
View reports based on the gathering	1 Select the <b>MessageStats Reports</b> node in the treeview or <b>Programs   Quest   MessageStats   MessageStats Reports</b> from the Start menu.
	2 Select the report you want to view. <b>NOTE:</b> For information about reports, please see the <i>MessageStats Reports User Guide</i> .

---

# MessageStats Information Sources

- [How Does MessageStats Gather Information?](#)
- [Gathering Microsoft Exchange Data](#)
- [Storing Data in the Database](#)
- [Reporting on Data](#)
- [Where to Go from Here](#)

## How Does MessageStats Gather Information?

MessageStats collects information about your messaging environment and email usage through a *gathering task*. You can create different types of gathering tasks using the templates that are available in the Create Task wizard.

First, you create a connection to the environment from which you want to gather data. For more information see [Creating a Connection to Exchange](#) on page 25.

Before you gather information from Exchange, ensure that the server from which you want to gather data is configured correctly. For information about Exchange-specific prerequisites and configuration, see the *MessageStats Quick Start Guide*.

For more information about the typical steps in collecting and viewing information in MessageStats, see [MessageStats Process Overview](#) on page 9.

## Gathering Microsoft Exchange Data

For Microsoft Exchange, MessageStats gathers two types of Exchange information:

**Table 1. Sources from which MessageStats gathers data.**

Type	Description
Tracking logs	Log files generated by Microsoft Exchange that track message-related events occurring on or between Exchange servers. For more information, see <a href="#">Gathering Exchange Tracking Logs</a> on page 13.

**Table 1. Sources from which MessageStats gathers data.**

Type	Description
Exchange Objects	<p>Exchange objects that are provided by an Exchange server. These objects include the following:</p> <ul style="list-style-type: none"><li>• Mailboxes and user information</li><li>• Mail-enabled groups in Active Directory</li><li>• Simple Mail Transfer Protocol (SMTP) domains and address templates for SMTP</li><li>• SMTP namespaces</li><li>• Public folders</li><li>• Mail contacts</li><li>• Content and attachments for mailboxes</li><li>• Content and attachments for public folders</li></ul> <p>For more information, see <a href="#">Sources of Exchange Object Information</a> on page 14.</p>

The information processed from the tracking logs and Exchange objects provides data about the flow and volume of email over user-defined periods.

During a gathering, MessageStats copies and processes tracking logs and enumerates Exchange objects, including the following:

- mailboxes and user information
- distribution groups
- Simple Mail Transfer Protocol (SMTP) domains
- address templates for SMTP
- SMTP internal namespaces
- public folders
- mail contacts

## Gathering Exchange Tracking Logs

Microsoft Exchange creates tracking log files to record all mail activity and usage. Each day, beginning at midnight UTC (Coordinated Universal Time), every inbound and outbound message for an Exchange server creates an entry (called an event) in an Exchange server's tracking log. Each routing step from message submission to delivery to a local mailbox or external gateway is recorded as a separate event.

Typically, after 24 hours Microsoft Exchange closes the current log and opens a new log for the next day. The closed log is available for MessageStats to gather and process. When you schedule gatherings, consider that daily tracking logs are closed by default at midnight UTC each day.

During a gathering task, MessageStats determines which tracking logs must be gathered. MessageStats gathers the most recently closed tracking log on the Exchange servers, and any tracking log information that was not previously gathered. MessageStats automatically selects the tracking logs that have not yet been gathered.

**i** | **TIP:** MessageStats gathers logs from Hub and Edge Transport servers. The tracking logs on Mailbox servers do not include all the information that is needed for reports. If your MessageStats gatherings are not processing any files, check to ensure that the tracking log path has been shared. You must manually share the tracking log folder.

When MessageStats gathers tracking logs, it searches for both compressed and uncompressed application logs in four locations:

**Table 2. Possible locations of the Exchange message tracking log.**

Location	Description
Tracking log share for a server	<p>This is the default location of the Microsoft Exchange tracking logs.</p> <p>If your Microsoft Exchange implementation does not use the default location, you can indicate the alternative path on the Tracking Logs tab of the Exchange Server Properties dialog box.</p> <p>For information about this log share, see <a href="#">Setting an Exchange Server to Archive Tracking Logs</a> on page 87.</p>
Archive log share for a server	<p>This is the location of the Microsoft Exchange archived tracking logs. Microsoft Exchange retains 7 days of tracking logs and purges all tracking logs older than 7 days to this location.</p> <p>For information about this archive log path, see <a href="#">Setting an Exchange Server to Archive Tracking Logs</a> on page 87.</p>
Database share	<p>This share indicates an alternate path for your Exchange database. Normally, MessageStats checks for Microsoft Exchange Server registry settings for the location of the Exchange Database location.</p>
System-wide archive log path	<p>This is the centralized location where you have manually moved or replicated archived tracking logs from one or more Microsoft Exchange servers.</p> <p>For information about this log path, see <a href="#">Selecting a Tracking Log Archive Location</a> on page 67.</p>

MessageStats analyzes and processes the events from each tracking log and stores the appropriate information in the MessageStats database.

In addition, MessageStats allows you to gather tracking logs from an archive on the local server or a system-wide archive location. Archived tracking logs are usually older than seven days and can be gathered by creating a task with the appropriate date range to include the missing logs.

Lastly, MessageStats allows you to revisit a previously gathered tracking log to gather deleted information or additional audit information.

## Sources of Exchange Object Information

Exchange object information does not come from the tracking logs. The information is available from the following locations:

- Microsoft Exchange for information including mailboxes and user information, distribution groups, SMTP domains, SMTP namespaces, public folders, and mail contacts
- Active Directory for information including mailboxes and user information, mail-enabled groups, SMTP domains, SMTP namespaces, public folders, and mail contacts
- The File System for store and volume sizes
- PerfMon counters for server availability

# Storing Data in the Database

You can use one of two database server implementations to store tracking log and Exchange object data:

- For evaluation and test purposes, you can use SQL Server Express.
- For production implementations, use full SQL Server.

You can also use a distributed database implementation. For information about distributed database implementations, contact Quest Support or Quest Professional Services.

## Reporting on Data

When you have completed an initial gathering, you can view reports based on the gathered information using the web-based reporting component called MessageStats Reports.

MessageStats Reports provides a collection of preconfigured reports that let you view data across multiple levels of an Exchange organization. You can change relevant report parameters immediately using Quick Filters or use the Report Wizard to create customized reports based on any data available in your MessageStats database.

To access MessageStats Reports from the console, perform the following actions:

- Select the **MessageStats Reports** node of the MessageStats treeview.
- Launch the web site where MessageStats Reports resides using Internet Explorer.

For more information about accessing the MessageStats Reports, see [Using the MessageStats Reports Console](#) on page 98. For detailed information about viewing reports, using filters to select content for reports, setting up subscriptions for reports, and creating custom reports and custom graphs, see the *MessageStats Reports User Guide*.

## Where to Go from Here

For information about using the console interface, see [Using the Console Interface](#) on page 16.

To add gatherings, see [Default Gatherings](#) on page 36 or [Beyond the Default Gathering](#) on page 44.

To review gathering task descriptions and dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

To view reports based on your gatherings, and to create custom reports, see the *MessageStats Reports User Guide*.

# Using the Console Interface

- [Introducing the MessageStats Console](#)
- [MessageStats Node](#)
- [MessageStats Server Node](#)
- [Database Management Node](#)
- [Exchange Organizations Node](#)
- [MessageStats Reports Node](#)
- [Support Node](#)
- [Regions Node](#)
- [Task Execution Servers Node](#)
- [Tasks Node](#)
- [Where to Go from Here](#)

## Introducing the MessageStats Console

This section contains information about the MessageStats console. Like all MMC consoles, the MessageStats console consists of a window divided into two panes:

- The left pane displays the console tree. The console tree is a hierarchical structure that shows the items (nodes) that are available in a console. These items can include folders, snap-ins, controls, Web pages, and other tools.
- The right pane contains the details pane. The details pane shows information and functions that pertain to items in the console tree.

For specific information about MMC, please see the online help provided by Microsoft.

## MessageStats Node

By default, the MessageStats folder is expanded to show the MessageStats node. This node contains the MessageStats Server that hosts MessageStats Scheduler Service and the task processors (Task Execution Server) used to gather Exchange tracking logs and statistics.

If you right-click the MessageStats node, the following options are available:

**Table 1. MessageStats node menu options.**

Menu Option	Description
About	Provides version and copyright information about the product.
Connect	Opens the Connect to MessageStats dialog box, allowing you to connect to one or more MessageStats Servers.



Table 1. MessageStats node menu options.

Menu Option	Description
Refresh	Allows you to refresh the MessageStats view. Refresh the view if you add new Exchange objects, regions, or tasks to the tree.
Help	Opens the online help. The MessageStats online help and the MMC online help are available from the same system.

## MessageStats Server Node

When you start MessageStats, you should see a MessageStats Server under the MessageStats node. The MessageStats Server is the server on which the MessageStats Scheduler Service was installed. If no server name appears, you must connect to the MessageStats Server manually.

### To connect to a MessageStats Server

- 1 Right-click the **MessageStats** node and select **Connect**.
- 2 Enter the name of the server on which the MessageStats scheduler service is installed.
- 3 Click **Connect**.

The MessageStats Server is the server on which the MessageStats scheduler service is installed. The console is usually installed on the same server.

- The server under the MessageStats node is the MessageStats server. This is the server that hosts the scheduler service.
- Task execution servers are computers that host the task processors.
- The MessageStats scheduler server and the task execution server can be installed on the same computer.

If you click on the MessageStats Server, the right pane displays information about how to get started.

## MessageStats Server Menu Options

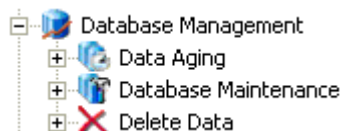
If you right-click a MessageStats Server, the following options are available:

Table 2. MessageStats server menu options.

Menu Option	Description
Disconnect	Allows you to disconnect the selected MessageStats server instance from the view.
Gathering Status	Opens the MessageStats Gathering Status report in MessageStats Reports.
License	Opens a dialog box through which you can license MessageStats. After MessageStats is licensed, this option is called License Information. You can use the License Information option to view or update your license.
Contact Support	Provides the contact information for you to contact Support.
Refresh	Allows you to refresh the MessageStats navigation treeview.
Properties	Opens the Server Properties dialog box. For more information, see <a href="#">Configuring the MessageStats Server</a> on page 60.

# Database Management Node

The MessageStats Database stores the information that is used by MessageStats Reports. When the database is properly tuned, information can be efficiently stored, and MessageStats Reports can quickly access the required data.



Over time, the MessageStats Database grows and the database server can become strained. However, it is critical that the database retain enough data for any historical reporting needs that might arise.

It is recommended that you follow the Microsoft Best Practices for backing up data and archiving historical data. To help you manage your database, MessageStats provides Database Management functionality. You can selectively delete obsolete data and tune the database to provide optimal performance.

For information about Database Management, please see [Database Management](#) on page 104.

# Exchange Organizations Node

Before you can gather information for MessageStats reports, you must establish a connection to the Exchange messaging environment.

The Exchange Organizations node lists the Exchange organizations to which MessageStats is connected. When you expand the Exchange Organizations node, the Exchange organizations appear as child nodes. The right pane lists the connected Exchange organizations and the server that is the access point to the organization.

When you right-click the Exchange Organizations node, the following MessageStats options are available:

**Table 3. Exchange organizations node menu options.**

Menu Option	Description
Connect	Used to connect to the Exchange organizations from which you want to gather data. For details about connecting to the Exchange organization, see <a href="#">Connecting to an Exchange Organization</a> on page 25.
Refresh	Refresh the MessageStats navigation tree.
Help	Opens the online help. The MessageStats online help and the MMC online help are available from the same system.

# Servers Node

This node contains a list of all servers in the Exchange organization. When you right-click a server, the following MessageStats options are available:

**Table 4. Servers node menu options.**

Menu Option	Description
Create Task	Starts the Create Task Wizard. For information about creating Tasks, see <a href="#">About the Create Task Wizard</a> on page 30.
Add to Task	Prompts you to select the task to which you want to add the server. For information about adding Exchange objects to tasks, see <a href="#">Editing Tasks</a> on page 35.

Table 4. Servers node menu options.

Menu Option	Description
Add to Region	Prompts you to select the region to which you want to add the server. For more information, see <a href="#">Regions Node</a> on page 19.
Refresh	Allows you to refresh the console navigation treeview.
Properties	Opens the Server Properties dialog box. For more information, see <a href="#">Setting Properties for an Exchange Server</a> on page 82.
Help	Opens the online help. The MessageStats online help and the MMC online help are available from the same system.

## MessageStats Reports Node

This node launches the MessageStats Reports in the right pane. MessageStats Reports are a web-based reporting component that is hosted on an IIS server.

For more information, see [Using the MessageStats Reports Console](#) on page 98.

## Support Node

The Support node provides links to additional resources to help you optimize your MessageStats use. You can use the links to access our self-service support portal where you can check articles in the Knowledge Base, view how-to videos, get the latest software downloads, and share information in the Messaging community.

## Regions Node

Once you have enumerated your Exchange organization topology, you can group Exchange servers into more meaningful groups called regions. Regions allow you to sort and group MessageStats usage reports based on a logical structure that more closely matches that of your enterprise. You can also distribute the gathering load by running gathering tasks against regions.

You can create regions that contain a group of Exchange servers. Regions allow you to create gathering tasks that are based on geography, business units, or any other grouping method applicable to your enterprise.

## Creating Regions

You can create new regions or add Exchange servers to a region at any time. All servers added to a region must be in the same Exchange organization.

### *To create a region*

- 1 Right-click the **Regions** node under the MessageStats Server.
- 2 Select **Create New Region**.
- 3 Enter the name of the region you want to create.
- 4 Expand the **Exchange Organizations** node and the subnodes.
- 5 Select a server and drag it into the region you created.

- OR -

- Right-click the server, select **Add to Region**, and then select the region.
- Repeat step 5 until the region contains all required Exchange objects.
- Expand your new region to verify the contents.

## Editing Regions

You might need to edit regions as a result of corporate restructuring or to balance the MessageStats gathering load. You can add items to a region, remove items from a region, and rename regions.

### **To remove a server or group from a region**

- Within the region, right-click the object that you want to delete and click **Remove from Region**.
- Verify that you want to delete the item from the region.

### **To rename a region**

- Right-click the region that you want to rename and click **Rename Region**.
- Enter the new name and click **OK**.

## Deleting Regions

You may be required to delete regions as a result corporate restructuring.

### **To delete a region**

- Select the region you want to delete, right-click it, and click **Delete Region**.
- Verify that you want to delete the region.

## Task Execution Servers Node

The Task Execution Servers node contains the servers on which you have installed MessageStats task processors. In a complete installation, task processors are installed on the same server as the MessageStats scheduler server and the MMC client console.

Tasks that consume resources can be run on a dedicated Task Execution Server. You can create additional Task Execution Servers through a distributed installation. In a distributed installation, you can install task processors on additional servers. This allows you to distribute the processing load for large gathering tasks such as the Exchange Public Folders gathering task.

Through the Task Execution Servers node, you can set properties for specific task execution servers. You can change the default task execution server, identify a path location to which the task log files are written, specify parameters for task logging activities, and set the number of task processors that can run concurrently.

For more information about setting properties for a task execution server, see [Configuring Task Execution Servers](#) on page 88.

## Available Options for Task Execution Servers

When you right-click a task execution server, the following options are available:

**Table 5. Task Execution Server Node Menu Options.**

Menu Option	Description
Set as Default	Allows you to set the default task execution server that is used when you create new gathering tasks. <b>NOTE:</b> You can specify a different task execution server when you are creating a new task.
Remove Server	Removes the task execution server from the MessageStats console. <b>NOTE:</b> To properly remove the task execution server, it is recommended that you remove the task processors from the server. When you remove the task processors, the server is automatically removed from under the Task Execution Servers node.
Refresh	Allows you to refresh the console navigation treeview.
Properties	Allows you to set the properties for the selected task execution server. For more information, see <a href="#">Configuring Task Execution Servers</a> on page 88.
Help	Opens the online help. The MessageStats online help and the MMC online help are available from the same system.

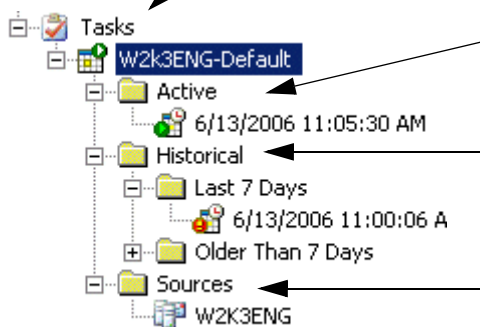
## Tasks Node

The Tasks node contains a list of all the tasks that you have configured and you can expand each task to show the Exchange objects (such as an organization or Exchange servers) included in the task.

If you right-click the Tasks node, you can set properties for all tasks. For more information, see [Introducing Task Default Properties](#) on page 92.

If you expand the Tasks node, you can view existing tasks and make changes to the individual tasks.

Expand the Tasks node to view the tasks that have been configured. The tasks are listed in the treeview.



You can view the current run of a task under the Active node. The individual component tasks that comprise the task are shown in the right pane.

Under the Historical node, you can view task occurrences that ran in the last seven days and before that.

The Sources node contains the sources that are associated with the task.

The tasks that appear in the Summary view provide the following information:

**Table 6. Tasks node summary view options.**

Information	Description
Name	Displays the name assigned to the task. To change the name, you can open the Task Properties dialog box and change the task name on the first page.
Credentials	Displays the credentials used to run the task. If you need to change the credentials, you can open the Task Properties dialog box and edit the Task Credentials page.

Table 6. Tasks node summary view options.

Information	Description
Schedule	Indicates the schedule frequency set for the task. To change the schedule, you can open the Task Properties dialog box and edit the Task Schedule page.
Next Occurrence	Indicates the next time the task will run. This information is based on the Task interval information you set on the Task Schedule page.
Description	Displays the description of the task as it appears on the Task Properties dialog box.
Progress	Displays a progress percentage and progress bar to represent all the constituent activities of the Task.

## Available Options for Tasks

You can perform the following actions for an individual task.

Table 7. Individual task options.

Option	Description
Cancel	Cancels the task (or component tasks) that are not complete. If you cancel a task, component tasks in progress finish and all pending tasks are cancelled.
Delete	Deletes the task from the Task list.
Properties	Opens the Properties dialog box for the selected task. For information about individual task properties, see the chapters about Default Gatherings and Extending Default Gatherings. <b>NOTE:</b> If you select the Tasks node and right-click, you can set default properties for all tasks. For more information, see <a href="#">Introducing Task Default Properties</a> on page 92.
Run Now	Allows you to start the task immediately. <b>NOTE:</b> If you select Run Now for a recurring task, the task still runs at the next scheduled interval.
Run Now with Override	If a task has run successfully, built-in gathering rules prevent a task from regathering information in the same (UTC) day. This option allows you to force a task to rerun and regather information when it has already completed successfully the same day. For more information, see <a href="#">Forcing an Update on Demand for Exchange</a> on page 34.
View	Allows you to customize the view of the MMC environment. This option is an MMC default.
Refresh	Allows you to refresh the console view.
Help	Opens the online help. MessageStats online help and the MMC online help are available from the same system, depending on the node selected in the treeview.

## Expanding Tasks in the Task Activity View

When you select a task in the treeview, it appears in the Task Summary view in the right pane. You can expand the task to view the task status and related information in the Task Activity view.

Table 8. Information available in the Task Activity View.

Information	Description
Description	Describes the tasks. For composite gathering tasks that contain many component tasks, the Description column lists each component task and any other associated task activities.

**Table 8. Information available in the Task Activity View.**

Information	Description
Source	Indicates the Exchange server against which the task is running.
Status	Indicates whether the task is Pending, Active, Finished, Pending Retry, Unknown, or Failed. MessageStats also shows a status icon beside the Description. For information about the status icons, see <a href="#">Status Icons</a> on page 24.
Progress	Contains a progress percentage and an associated progress bar. The progress bar indicates the progress of the task, including all associated task activities.
Waiting For	Indicates the gathering task that must be completed before this task can begin. For information about gathering task dependencies, see <a href="#">Appendix B: Gathering Task Dependencies</a> on page 114.
Start Time	Shows the date and time when the task started.
Finish Time	Shows the date and time when the task finished.
Duration	Shows the length of time taken to complete the task.
Execution Server	Shows the server that ran the task.

## Cancelling Tasks

From the Task Activity view, you can also cancel task activities.

### **To cancel a task**

- 1 Expand the task in the listview in the right pane.
- 2 Right-click the task activity you want to cancel.
- 3 Click **Cancel**.
- 4 Verify that you want to cancel the task.

If you cancel tasks, complete information is not stored in the database. If you cancel tasks that are dependencies for another task, the second task might not gather information as expected.

## Reviewing and Saving Task Activity Logs

From the Task Activity view in the right pane, you can review the logs for active, pending, or completed tasks.

### **To view individual task logs**

- 1 Expand the task in the listview in the right pane.
- 2 Right-click the task activity for which you want to view the log.
- 3 Click **View Log**.
- 4 Click events in the log and review the event descriptions at the bottom of the dialog box.
- 5 If you want to save the task log as a compressed file, click **Save Log File as As Zip** and select the location where you want to save the file.

For troubleshooting purposes, you might want to save multiple task log files to a compressed format so that you can send the files to a support person.

### **To save task logs for a task occurrence**







- 1 Locate the task occurrence in the treeview (in the Historical or the Active folder).
- 2 Right-click the task occurrence for which you want to save the log files.
- 3 Click **Save Task Logs**.
- 4 Select the location to which you want to save the zipped file.

You can also save the task log file for a specific task activity by expanding the task in the listview, selecting a specific task activity, right-clicking and selecting Save Task Logs.

## Status Icons

The Task Activity listview provides status icons as visual cues to the success or failure of the gatherings.

Table 9. Task Activity Status Icons.

Icon	Description
	This icon indicates that the task activity has not started yet. This icon is displayed when the status is Pending or Pending Retry.
	This icon indicates that the task activity is currently active.
	This icon indicates that the task activity has finished.
	This icon indicates that the task completed with errors.
	This icon indicates that the task activity failed.
	This icon indicates that the task activity status is unknown.

## Where to Go from Here

First you create a connection to the Exchange environment from which you are gathering data. For more information, see [Connecting to an Exchange Organization](#) on page 25.

After you have connected to the Exchange servers from which you want to collect information, you create gathering tasks to collect the information.

To create Default Gathering tasks, see [Exchange Default Gathering Task Template Details](#) on page 38.

To create other gathering tasks, see [Beyond the Default Gathering](#) on page 44.

For details about setting parameters for an Exchange organization, such as setting up mailbox audits, identifying SMTP namespaces and IP addresses that should be reported as internal, and specifying delivery time thresholds, see [Setting Properties for a Specific Exchange Organization](#) on page 67.

For details about setting parameters for a specific Exchange server, such as assigning server roles, setting thresholds for reports, and identifying mailbox database locations, see [Setting Properties for an Exchange Server](#) on page 82.



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# Creating a Connection to Exchange

- [Connecting to an Exchange Organization](#)
- [Viewing Connected Exchange Organizations](#)
- [Renaming an Exchange Organization](#)

## Connecting to an Exchange Organization

You use the Connect option to connect to an Exchange server that MessageStats uses as the access point to enumerate an Exchange organization.

By default, the server to which you connect is also used as the server from which data is gathered. However, you can specify different Exchange servers for gatherings at the Exchange organizational level or at the task level.

## Prerequisites

When you connect to an Exchange organization, you must select an appropriate Exchange connection server. The connection server is used to enumerate the Exchange organization:

- For Exchange 2010 and Exchange 2013, the Exchange server must have the Client Access (CAS) role installed. (You cannot specify a CAS array as the connection server, you must specify an individual server.) You must also specify an Exchange mailbox for MAPI logon.

For Exchange 2010 and 2013, the account that is used to run gathering tasks must have full access to the specified mailbox. In most cases, you could specify the mailbox associated with the task credentials (which might be the same as the MessageStats service account).

**i** | **TIP:** MessageStats has provided a PowerShell script that allows you to set a user account with full access rights to a specific mailbox. You can find the script in the MessageStats installation directory (by default this is C:\Program Files\Quest\MessageStats) in a folder called Scripts.

For information about granting full rights to an Exchange 2010 or 2013 mailbox, see the section titled “Granting Full Rights to an Exchange 2010 or 2013 Mailbox” in the *MessageStats Quick Start Guide*.

- For Exchange 2013, the CAS server used for connection should be configured include NTLM among the IIS authentication methods that are allowed. For example, you could allow NTLM, Basic, and Negotiate authentication using PowerShell and entering the following:

```
Get-OutlookAnywhere | Set-OutlookAnywhere -IISAuthenticationMethods  
basic,ntlm,negotiate
```

- For Exchange 2016 or Exchange 2019, the Exchange server must have the Mailbox role and the gathering account must be a member of the View-Only Organization Management group.

### **To connect to an Exchange organization**

- 1 Select the **Exchange Organizations** node.

- 2 Right-click and select **Connect**.

Two-way trusts are required between the domain on which MessageStats resides and any other domain you select.

- 3 Select all the versions of the Exchange mailbox servers that exist in the organization.

- 4 Specify the connection server as follows:

**Table 1. Information required for different organization configurations.**

<b>If the organization contains...</b>	<b>Enter the following information...</b>
At least one public folder or mailbox server that is running Exchange 2010.	<ol style="list-style-type: none"> <li>1 Enter the Exchange NETBIOS name for an Exchange 2010 CAS server.</li> <li>2 Specify a mailbox in one of the following formats: <ul style="list-style-type: none"> <li>▪ Display Name</li> <li>▪ Alias</li> <li>▪ SMTP Address</li> </ul> <p><b>NOTE:</b> If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as <code>FirstName.Lastname@domain.com</code>.</p> </li> </ol>
At least one public folder or mailbox server that is running Exchange 2013.	<ol style="list-style-type: none"> <li>1 Enter the NETBIOS name for an Exchange 2013 CAS server.</li> <li>2 Specify a mailbox in one of the following formats: <ul style="list-style-type: none"> <li>▪ Display Name</li> <li>▪ Alias</li> <li>▪ SMTP Address</li> </ul> <p><b>NOTE:</b> If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as <code>FirstName.Lastname@domain.com</code>.</p> </li> </ol>
At least one public folder or mailbox server that is running Exchange 2016 or Exchange 2019.	Enter Exchange NETBIOS name for an Exchange 2016/2019 Mailbox server.

The Exchange 2010 / 2013 mailbox is used for MAPI logon to collect the mailbox information. The credentials used to run tasks must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.

**i | TIP:** In most cases, you could specify the mailbox associated with the task credentials.

If you have an Exchange mixed environment that includes Exchange 2010 servers that contain public folders, you must set an Exchange 2010 server for legacy public folder gatherings in the organization properties after you connect to the organization. For details, see [Selecting a Server for Legacy Public Folder Gathering](#) on page 80.

For Exchange 2016 and Exchange 2019, PowerShell is used instead of MAPI for the mailbox and public folder gatherings. For Exchange 2013 and later, Exchange Web Services (EWS) is used for the mailbox contents and attachments gatherings. (Public folder content and attachment gatherings are not available for Exchange 2016/2019.)

- 5 Click **Next**.

- 6 If you want to associate this Exchange organization with a task execution server other than the default server, select a server in the Execution Server box.

Task execution servers are servers on which you installed the task processors. If you have only one task execution server, this option is dimmed.

7 Verify the credential settings that is displayed for the Exchange server connection.

- OR -

To use different credentials than the account that is specified for the default Task Credentials, select **Specify Explicit Credentials** and enter the account and password you want.

Click **Accept**.

8 If the validation is successful, click **OK** to continue.

## Viewing Connected Exchange Organizations

When you select and expand an Exchange organization under the Exchange Organizations node, the right pane displays the servers in the selected Exchange organization.

If you have Exchange organizations that have the same organization name and display name, the Active Directory unique identifier is appended to the Exchange organization name. To change the MessageStats name for the organization, see [Renaming an Exchange Organization](#) on page 27.

When you right-click a connected Exchange organization, the following MessageStats options are available.

Table 2. Exchange organization menu options.

Menu Option	Description
Create Task	Starts the Create Task Wizard. For information about creating tasks, see <a href="#">About the Create Task Wizard</a> on page 30.
Add to Task	Prompts you to select the task to which you want to add the Exchange object. For information about adding Exchange objects to tasks, see <a href="#">Editing Tasks</a> on page 35.
Regather Structure	MessageStats automatically runs the Exchange Organization Structure gathering every night at midnight (local time). If you have made changes to your Exchange organization, you can use this option to force a regathering to enumerate the administration groups, routing groups, and Exchange servers that comprise the organization.
Rename	Allows you to rename the Exchange organization. For information about renaming the organization display name in MessageStats, see <a href="#">Renaming an Exchange Organization</a> on page 27.
Refresh	Allows you to refresh the console navigation tree.
Properties	Opens the Exchange Organization Properties dialog box. For more information, see <a href="#">Setting Properties for a Specific Exchange Organization</a> on page 67.
Help	Opens the online help. The MessageStats online help and the MMC online help are available.

## Renaming an Exchange Organization

In some Exchange networks, you may have Exchange organizations with the same organization name and the same display name. You can use the Rename option to rename an Exchange organization with a unique display name that is used to identify it in the MessageStats console and in MessageStats Reports.

If you rename an Exchange organization, you must update any report subscriptions, custom reports, default filters, and saved reports that use the old organization name with the new name.

### ***To rename an Exchange organization***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Rename**.

The Use Default Value field displays the Exchange organization name current value which is comprised of the Exchange display name (organization name). In situations where more than one organization has the same name, the Active Directory unique identifier also displays.

- 3 Select **Define Explicit Value** and enter a unique name in the box that is used to identify the organization in MessageStats.
- 4 Click **OK**.

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# Creating Gathering Tasks

- [About Tasks](#)
- [About the Create Task Wizard](#)
- [Intelligent Gathering for Exchange](#)
- [Creating a Default Gathering Task](#)
- [Editing Tasks](#)

## About Tasks

The following sections explain how to create gathering tasks using the Create Task Wizard and explains how the Default Gathering task is used.

A task is a collection of gathering activities. When you create a task, it is listed in the Tasks node of the navigation tree. When you click the Tasks node, the task appears in the Tasks Summary View.

## What is the Tasks Summary View?

The Tasks Summary View shows all the tasks created for the MessageStats Scheduler Server. The Tasks Summary view displays the properties of a task, including the task name, credentials, schedule, next occurrence, description, and progress.

Tasks are scheduled to run an occurrence of that task. Each occurrence has a start date and time. Each occurrence lists the activities and associated properties in the Task Activity view.

## What is the Task Activity View?

The Task Activity view displays detailed properties of the activities that comprise an individual task. These properties include activity descriptions, source, status, progress, runtime gathering dependencies, start and finish time, activity duration, and execution server.

## How Often Can a Task Gather Information?

To reduce the impact on resources, built-in gathering rules prevent a task from gathering information more than once within a single (UTC) day. If a task has already successfully completed and you rerun it in the same day, it does not regather the information. Changes do not appear in reports until the task runs the following day.

However, if you have made changes and want to have them immediately reflected in reports that day, you can use the Run Now with Override option to force a task to regather information. For more information, see [Forcing an Update on Demand for Exchange](#) on page 34.

# About the Create Task Wizard

You use the Create Task Wizard to create and configure gathering tasks. The Create Task Wizard is available from several levels in the Exchange organization structure.

## To access the Create Task Wizard

- 1 Expand the **MessageStats** node and select an Exchange organization or an Exchange server.
- 2 Right-click and select **Create Task**.

Some gathering tasks can be created only at specific levels of an Exchange organization. The following table indicates at which levels each gathering is available and can be run.

**Table 1. Levels at which specific gathering tasks are available.**

Gathering Name	Available at the following Exchange source level:	
	Organization	Server
Default	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange Organization-Level	<input checked="" type="checkbox"/>	
Minimum Exchange Organization-Level	<input checked="" type="checkbox"/>	
Complete Exchange Server-Level	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Minimum Exchange Server-Level	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Role-based gatherings for Exchange</b>		
Complete Exchange Server-Level for Mailbox Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange Server-Level for Transport Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange Server-Level for Edge Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange Server-Level for Unified Messaging Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Complete Exchange Server-Level for Client Access Server	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Individual Gathering Tasks</b>		
Exchange Public Folders	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Connectors	<input checked="" type="checkbox"/>	
Exchange Mail Contacts	<input checked="" type="checkbox"/>	

**Table 1. Levels at which specific gathering tasks are available.**

Gathering Name	Available at the following Exchange source level:	
	Organization	Server
Exchange Distribution Groups	<input checked="" type="checkbox"/>	
Exchange Databases	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Internal Namespaces	<input checked="" type="checkbox"/>	
Exchange Mailboxes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Mailbox Security	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Mail-Enabled Objects	<input checked="" type="checkbox"/>	
Exchange Organization Structure	<input checked="" type="checkbox"/>	
Exchange Public Folder Tree Structure Analysis	<input checked="" type="checkbox"/>	
Exchange Public Folder Tree Structure Enumeration	<input checked="" type="checkbox"/>	
Exchange Virtual Servers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Public Folder Instance Enumeration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Public Folder Security	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Server Properties	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Tracking Logs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mailbox Account Properties	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Server Uptime Performance Counter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exchange Mailbox Content and Attachments		<input checked="" type="checkbox"/>
Exchange Public Folder Content and Attachments		<input checked="" type="checkbox"/>
Reporting Aggregation	<input checked="" type="checkbox"/>	

For gathering task descriptions and dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

# Intelligent Gathering for Exchange

MessageStats retrieves the server roles for a server from Active Directory, assigns a matching built-in server role value in MessageStats, and identifies the role as “discovered” in the server properties.

Using the server role, MessageStats can determine which server-level gathering tasks can run against a specific Exchange server. For example, if a server does not have the Mailbox role, MessageStats does not allow a Mailbox gathering task to run against the server.

The following table shows which gathering tasks can be run against servers that have certain roles assigned.

**Table 2. Tasks for specific Exchange server roles.**

Exchange Version	Exchange Server Role	Allowed Gathering Tasks
Exchange 2010 Exchange 2013 Exchange 2016 Exchange 2019	Mailbox	<ul style="list-style-type: none"> <li>Exchange Databases</li> <li>Exchange Mailboxes</li> <li>Exchange Mailbox Security</li> <li>Exchange Mailboxes Content and Attachments</li> <li>Exchange Public Folder Content and Attachments</li> <li>Exchange Public Folder Instance Enumeration</li> <li>Exchange Public Folder Security (Exchange 2013 and later)</li> <li>Exchange Server Properties</li> <li>Exchange Virtual Servers</li> <li>Mailbox Account Properties</li> <li>Server Uptime Performance Counter</li> <li>Tracking Log Expansion</li> <li>Tracking Log Copy</li> <li>Exchange Tracking Log</li> <li>Tracking Log Compression</li> <li>Tracking Log Archive</li> </ul>
Exchange 2010 Exchange 2013 Exchange 2016 Exchange 2019	Edge Transport	<ul style="list-style-type: none"> <li>Tracking Log Expansion</li> <li>Exchange Tracking Log</li> <li>Tracking Log Copy</li> <li>Tracking Log Compression</li> <li>Tracking Log Archive</li> </ul>
Exchange 2010	Hub Transport	<ul style="list-style-type: none"> <li>Tracking Log Expansion</li> <li>Exchange Tracking Log</li> <li>Exchange Server Properties</li> <li>Exchange Virtual Servers</li> <li>Server Uptime Performance Counter</li> <li>Tracking Log Copy</li> <li>Tracking Log Compression</li> <li>Tracking Log Archive</li> </ul>
Exchange 2010 Exchange 2013	Client Access	<ul style="list-style-type: none"> <li>Exchange Server Properties</li> <li>Exchange Virtual Servers</li> <li>Server Uptime Performance Counter</li> </ul>
Exchange 2010	Unified Messaging	<ul style="list-style-type: none"> <li>Exchange Server Properties</li> <li>Exchange Virtual Servers</li> <li>Server Uptime Performance Counter</li> </ul>



You can include a server in a gathering task even if the task cannot be run against that server due to its server role. When the gathering task is run, it gathers only from servers with the appropriate roles and skips any servers with a role that does not allow the gathering to be run.

For a complete list of gathering tasks and task dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

## Creating a Default Gathering Task

You create tasks to collect data from a messaging environment such as Exchange or Lync. The initial gathering task provides immediate information about your Exchange or Lync environment. In a large enterprise, the initial task might be limited to a single group or a local server.

Most organizations add more tasks to collect information from the rest of the Exchange organization and extend gatherings to include additional information. To optimize collection performance, you can create multiple tasks to collect different information on different schedules.

The first task that you create is the Default Gathering task. This is a composite task that includes several gathering tasks and provides the base Exchange information needed to populate the core MessageStats Reports.

Most organizations run the Default Gathering task on a daily schedule to ensure that the MessageStats database is kept up-to-date with the widest range of available data. You can create Default Gathering tasks for Exchange organizations or individual servers.

The Create Task wizard consists of five base pages and any additional pages that are specific to the type of gathering task you are creating. The five base pages are as follows:

- Select Task Template
- Task Execution Server
- Task Schedule
- Task Logging
- Task Credentials

For information about the base page configuration options, see [Exchange Default Gathering Task Template Details](#) on page 38.

## Creating Additional Gathering Tasks

As you determine the volume of information that is gathered by the Default Gathering tasks, you might want to create tasks with different schedules to balance the server resource loads, or create a task that includes a single gathering.

Some gathering tasks require additional configuration information. These tasks include Exchange Tracking Logs Gathering, Mailbox Content and Attachments Gathering, Public Folder Content and Attachments Gathering, and Distribution Group Membership. For information about these gathering tasks, see [Extending Gathering Tasks](#) on page 44.

### **To create a new task**

- 1 Expand the **Exchange Organizations** node and select an organization or a server.
- 2 Right-click and select **Create Task**.
- 3 Select the template for the type of gathering that you want.
- 4 Complete the pages of the Create Task Wizard as required.

For descriptions of the individual gathering tasks and their dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

# Configuring Tasks to Run on a Regular Schedule

You can set up recurring tasks in two ways:

- by creating and configuring a task to run at regular intervals
- by editing an existing task to add recurrence

## ***To configure an existing task to run on a regular schedule***

- 1 Expand the **Tasks** node and select the task.
- 2 Right-click and select **Properties**.
- 3 Click **Next** until the Schedule page is displayed.
- 4 Select the Task Period and then set the schedule and frequency as required.
- 5 Complete the Task Wizard and click **Finish**.

## ***To create a new task to run on a regular schedule***

- 1 Expand the **Exchange Organizations** node and select an organization or a server.
- 2 Right-click on the appropriate Exchange source and select **Create Task**.
- 3 Select a task from the list and enter a name for the task.

The name you enter appears in the Tasks Summary View when you expand the Tasks node. Ensure that the name is unique but reflects the purpose of the task, such as ServerX\_Mailbox Content and Attachments.

- 4 Click **Next** to go to the Task Execution Server page.
- 5 Click **Next** to go to the Task Schedule page
- 6 Select the **Daily**, **Weekly**, or **Monthly** Task Period.
- 7 Set the appropriate interval for the period you have selected.
- 8 Complete the Task Wizard and click **Finish**.

# Forcing an Update on Demand for Exchange

Typically, an Exchange gathering task is not run more than once a day (UTC). If a gathering task has run successfully during the day and you run it again in the same day, the task does not regather the information. If a task has successfully completed and you then make changes in Exchange, you will not see the changes in reports until the gathering task is run the next day.

Sometimes you might make changes and want to see the changes immediately reflected in reports regardless of whether the associated gathering task has already completed successfully that day. In this situation, you can use the Run Now with Override option.

## Example of Using the Override Option

Suppose you have created a new distribution group in Exchange. The Default Gathering task (which includes the Distribution Group gathering task) completed earlier that day.

If you create a separate Distribution Group gathering task and run it, the task does not regather the distribution group information in the same UTC day since the task has already completed successfully. However, you can use the Run Now with Override option to force the task to regather the distribution group information. The reports will now show the updated information.

The Run Now with Override option is available for most gathering tasks.

### ***To Force a Task to Regather Information***

- 1 Expand the **Tasks** node in the treeview and select the specific gathering task that you want to rerun.
- 2 Right-click and select **Run Now with Override**.

To rerun a task that is actually part of a larger gathering task, you can create a new gathering task using the appropriate template and set the task to "Run Once" in the future. Select the new task in the treeview, right-click and use the Run Now with Override option to force the task to run immediately and to regather only the information you want.

## **Editing Tasks**

You can edit tasks in the following ways:

- Add more Exchange sources to an existing task
- Change the properties of an existing task

### ***To add more Exchange sources to an existing task***

- 1 Expand the navigation tree and browse to the organization or server that you want to add.
- 2 Right-click and select **Add to Task**, and then select the task from the list and click **OK**.

- OR -

Drag the organization or server into the appropriate task.

When you are creating an additional task, you can drag the Exchange objects into the task.

### ***To change the property of an existing task***

- 1 Select the task from the Tasks Summary View.
- 2 Right-click and select **Properties**.
- 3 Step through the wizard and change the properties as required.

---

# Default Gatherings

- [About the Exchange Default Gathering Task](#)
- [Creating an Initial Task for Exchange](#)
- [Exchange Default Gathering Task Template Details](#)
- [Observing Task Progress](#)
- [Setting a Default Gathering to Run on a Schedule](#)

## About the Exchange Default Gathering Task

To perform an initial gathering, you create a Default Gathering task. The Default Gathering task is a composite task that initiates the following task processors in the order of their defined dependencies.

- Internal Namespaces
- Connectors
- Mail Contacts
- Mailbox Account Properties
- Distribution Groups
- Exchange Databases
- Mailboxes
- Mail-Enabled Objects
- Server Properties
- Exchange Tracking Logs
- Virtual Servers
- Server Uptime Performance Counter
- Reporting Aggregation

Most organizations run the Default Gathering task on a daily schedule to ensure that the MessageStats database is updated with the widest range of available report data. For more information about gathering task dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

## Tasks Excluded from the Default Gathering Task

The Default Gathering task does not include the following gathering tasks:

- Audit tasks. For information about audits, see [Configuring Audits](#) on page 56.

- Exchange Public Folders task (which contains Exchange Public Folder Tree Structure Analysis, Exchange Public Folder Tree Structure Enumeration, and Exchange Public Folder Instance Enumeration)
- Exchange Public Folder Security (Exchange 2013 and later)

**i** | **NOTE:** The public folder reports do not contain data after you run the Default gathering. You must run the Exchange Public Folders gathering tasks to populate the reports.

- Mailbox Security
- Exchange Mailbox Content and Attachments task
- Exchange Public Folder Content and Attachments task

For a description of all gathering tasks and any task dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

## Creating an Initial Task for Exchange

After you install MessageStats, it is recommended that you create an initial Default Gathering task for all Exchange organizations.

**i** | **TIP:** Creating a very large task (such as a task that runs against your entire Exchange organization) can result in a lengthy gathering time. Carefully consider the amount of information being gathered when you create your initial tasks. You can create Default Gathering tasks for Exchange organization or individual servers. You can also create regions and create tasks to run against a region.

### To create an initial Default Gathering task

- 1 Expand the **Exchange Organizations** node and select an Exchange organization.
- 2 Right-click and select **Create Task**.
- 3 Select **Default Gathering** and enter a name for the gathering task.

The name you define appears in the task list under the Tasks node. Select a unique name so you can later identify the task.

- 4 Step through the Create Task Wizard, clicking **Next** at each page.

**Table 1. Create Task Wizard default settings.**

Wizard Page	Default Setting
Tracking Log Date Range	Yesterday
Task Execution Server	Default Server The default task execution server.
Task Schedule	Now
Task Logging	Use the default configuration of status-level logging.
Task Credentials	Credentials provided during installation for MessageStats Scheduler Service user account.
Gathering Server	By default, this is the Exchange server that is currently defined as the connection server to the Exchange organization.
Mailbox MAPI	By default, this is the Exchange server that is currently defined as the gathering server for Exchange 2010 or Exchange 2013 organization. <b>NOTE:</b> This page is used for any mailbox gathering tasks. The Default gathering includes the Exchange Mailbox gathering.

- 5 Click **Finish**.
- 6 View the gathering progress by expanding the **Tasks** node and browse to the task.

# Setting a Default Gathering to Run on a Schedule

When you are satisfied that the gatherings have collected the information and the MessageStats Database is populated correctly, you can schedule a recurring task to automatically collect and process data.

## *To configure an existing task to run on a regular schedule*

- 1 Expand the **Tasks** node and select the task.
- 2 Right-click and select **Properties**.
- 3 Click **Next** until the Schedule page is displayed.
- 4 Select the Task Period and then set the schedule and frequency as required.
- 5 Complete the Task Wizard and click **Finish**.

# Exchange Default Gathering Task Template Details

To configure an Exchange Default Gathering task at the Organization level, the Create Task Wizard presents the base pages that allow you to define the required task information.

[Selecting the Task Template](#)

[Setting the Date Range for Tracking Logs](#)

[Specifying the Task Execution Server](#)

[Scheduling the Task](#)

[Enabling Task Logging for Support](#)

[Specifying Credentials for a Task](#)

[Selecting a Gathering Server](#)

[Selecting a Server for Collecting Mailbox Data](#)

## Selecting the Task Template

Use the Select Task Template page to select a gathering task template and to name the task. Ensure that the name is unique but reflects the purpose of the task.

For a description of all gathering tasks and any task dependencies, see [Appendix B: Gathering Task Dependencies](#) on page 114.

Table 2. Selecting the task template.

Option	Definition
Name	Enter a task name. The name that you enter appears in the task list of the Tasks Summary View. To change the task name, right-click the name from the Tasks Summary node, select Properties, and edit the name.
Template	Select the template from the template list for all available gathering tasks. The gathering task description is displayed under the Template box.

# Setting the Date Range for Tracking Logs

Use the Tracking Log Date Range page to configure the date range for the tracking log gathering. Since many MessageStats gathering tasks do not require tracking log information, this page only appears when you select the Default Gathering task or the Exchange Tracking Log template.

**Table 3. Selecting a date range for tracking logs.**

Option	Definition
Date Range	Select Yesterday, Last 3 Days, Last Week, or Custom. If you select the Yesterday, Last 3 Days, or Last Week date ranges, the start and end dates are automatically updated to reflect the date range you selected. If you select the Custom date range, you must enter the start date and end date in the boxes.
Start Date	Click the arrow to select the Start Date from the calendar.
End Date	Click the arrow to select the End Date from the calendar.

# Specifying the Task Execution Server

Use the Task Execution Server page to specify which task execution server you want to use to run the task if you do not want to use the default gathering server.

If you installed the MessageStats Console through a custom or distributed installation, you had the option of installing additional task processors on separate servers.

**Table 4. Changing the task execution server used for a task.**

Option	Definition
Server	Specify the Task Execution Server you want to use to run the task. If you have installed additional task processors on separate servers, you can select a different Task Execution Server. If you installed only one Task Execution Server, the Server box is read-only. For example, you might select a Task Execution Server that is closer to the MessageStats Database server rather than close to the Exchange server. Since most of the data is going from the task processor to the SQL database, this could improve performance.

# Scheduling the Task

Use the Scheduling Tasks page to schedule gathering tasks. You can run a task once or create a regular scheduled task:

**Table 5. Scheduling the task to run.**

Option	Definition
Task Period	Select the time period (Daily, Weekly, Monthly, Once Only, Now) for the scheduled task. For recurring tasks, you can set the recurrence for different intervals:  <b>Daily:</b> By default, the Daily Task Period is configured to perform the gathering task every day. You can change the interval to every two days or at any other appropriate daily period.  <b>Weekly:</b> Using the Weekly period, you can set the following types of schedules: gather every second Tuesday; or gather every Monday, Wednesday, and Friday; or any other combination.  <b>Monthly:</b> Using the Monthly period, you can set the following types of schedules: gather on the first day of each month; gather on the last Friday of March, June, September, and December (each quarter); gather on the fifteenth day of every other month; or any other combination.
Start Time	Enter the start time for the scheduled task.
End Time	You do not need to set an End Time for the schedule. If you want to set an end time, click the check box to select it.
Start Date	Select a start date for the scheduled task.

## Enabling Task Logging for Support

MessageStats creates log entries during several processes. If you contact Support for assistance, Support might request that you change your logging detail level to help troubleshoot technical issues. You use the Task Logging page to set logging at the task level.

For information about setting logging at the scheduler service level, see [Configuring Service Logging](#) on page 61.

**Table 6. Setting task logging levels.**

Option	Definition
Enable logging for the given Task Processor	Select the box to enable logging for this gathering task. You can identify the detail level the task logs.
Log detail level	Set the level of detail that should be included in the log files.
Record errors in the Windows Application Event Log	Select this option and MessageStats also records errors in Windows Application Event logs.

## About Logging Levels

You can define the logging level for your task logs. The following log levels are available, from the most detailed to the least detailed.

**Table 7. Task logging levels.**

Log Level	Detail
Trace	Trace level logging is extremely detailed logging that includes errors, warnings, and status messages, and also low-level event details. Trace logging is only used with custom components provided by MessageStats development for diagnostic purposes. This level of logging can generate a large log file and can affect system performance.
Debug	Debug level logging includes errors, warnings, and status messages, and also low-level event details. Quest Support might ask you to set logging to the debug level to identify and resolve an issue. Use debug-level logging only at the request of Quest Support, since the log files can grow rapidly and can affect system performance. These logs contain very detailed entries.



Table 7. Task logging levels.

Log Level	Detail
Status	Status level logging includes warnings and errors, as well as the regular flow of major events within MessageStats. Use the Status level for a new installation to include more detailed logs.
Warning	Warning level logging includes errors that appear at the Errors level. The Warning level also includes errors that occurred but from which MessageStats recovered and continued gathering. Use this level for established and stable implementations.
Errors	Errors level logging includes errors that caused a gathering task to terminate.

It is recommended that you periodically remove obsolete logs. If you want, you can set up task logging management for the task execution server. After specifying an expiry period, you can set task log files to be deleted, to be moved to a backup location, or to be compressed and moved to a backup location. For more information, see [Setting Up Archiving for Task Logs](#) on page 89.

## Specifying Credentials for a Task

Using the Task Credential page, you set the security credentials for the task. By default, this page displays the credentials that you defined for the MessageStats Scheduler Service during installation. If you changed the Task Execution Server, this page automatically displays the credentials that you specified for that server.

Credentials are not verified in this page. Ensure that you enter a valid account or the gathering tasks will fail. Ensure that the credentials that are specified have the appropriate permissions to run the task against the selected Exchange servers. For more information, see the *MessageStats Quick Start Guide*.

## Selecting a Gathering Server

For organization-level gathering tasks, the Exchange server that is defined as the default Connection server for the Exchange organization is used to gather information. The Connection server is the Exchange server that MessageStats uses as the access point to enumerate an Exchange organization.

On the Gathering Server dialog, you can select a different Exchange server in the organization from which to collect information when creating a Default gathering task. For performance reasons, you may want to gather Exchange information from an Exchange server other than the Connection server.

**i** | **IMPORTANT:** You must enter a NETBIOS server name. Do not use the FQDN (Fully Qualified Domain Name) or the IP address for the server.

Table 8. Specifying a gathering server.

Option	Definition
Using the currently defined Connection server.	For organization-level gathering tasks, the Exchange server that is defined as the Connection server for the Exchange organization is used to gather information. The Connection server is the Exchange server that MessageStats uses as the access point to enumerate an Exchange organization.
I want to use the following Exchange server.	You can select a different Exchange server in the organization from which to collect information when creating a gathering task. For performance reasons, you may want to gather Exchange information from an Exchange server other than the Connection server.  For information about specifying the gathering server, see <a href="#">Selecting a Separate Gathering Server</a> on page 78.

# Selecting a Server for Collecting Mailbox Data

In most cases, you gather mailbox data using the Exchange server that is specified as the MessageStats connect-to server for the organization. This server is displayed under the text: Currently using the default Gathering Server for the organization.

In some situations, you may want to gather the information using an Exchange server other than the Connection Server. This may be a server that is geographically closer. In other cases, you might want to collect the mailbox information directly from the specified server.

The Exchange server from which you are gathering the mailbox data must contain at least one mailbox database.

In the Mailbox MAPI page you can select one of the following options:

**Table 9. Specifying a server for gathering mailbox data.**

Option	When to use
I want to use the following server for mailbox gathering tasks.	Select this option to specify a different Exchange server than the gathering server that was defined for the organization. This may be an Exchange server that is located geographically closer.
For an Exchange 2010 mailbox server	Select the Exchange Client Access Server (CAS) that should be used for mailbox gatherings for this server. Specify a mailbox for MAPI logon in one of the following formats: <ul style="list-style-type: none"><li>• Display Name</li><li>• Alias</li><li>• SMTP Address</li></ul> The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists. <b>NOTE:</b> The mailbox is not validated on this property page. Ensure that it is a valid mailbox or the mailbox tasks will fail for this server.
For an Exchange 2013 mailbox server	Select the Exchange Client Access Server (CAS) that should be used for mailbox gatherings for this server. Specify a mailbox for MAPI logon in one of the following formats: <ul style="list-style-type: none"><li>• Display Name</li><li>• Alias</li><li>• SMTP Address</li></ul> The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.
Access the Exchange server directly	Select this button if you want to gather the mailbox information directly from this Exchange mailbox server. This might be in a situation where this server is geographically isolated.

## Observing Task Progress

By observing the progress of the Default Gathering task, you can see how the different gatherings accumulate data to populate the MessageStats Database. Some gathering tasks cannot begin until other tasks are completed. For more information, see [Appendix B: Gathering Task Dependencies](#) on page 114.

### **To view the progress of the gathering task**

- 1 Expand the **Tasks** node of the navigation tree.
- 2 Select the task from the list.

In the right pane, the task is expanded into all the constituent activities and shows the following information.

**Table 10. Information provided for each task.**

<b>Information</b>	<b>Description</b>
Description	Lists the individual task activities for each Exchange server in the organization.
Source	Lists the Exchange server the task was created for.
Status	Indicates whether the task status is Pending, Pending Retry, Processing, Success, Finished, Failed, Aborted, Warnings, or Unknown.
Progress	Shows a progress bar and a percentage indicator for each task activity.
Duration	Indicates the amount of time taken to complete each task activity.
Start Time	Indicates when the task started.
Finish Time	Indicates when the task finished.
Waiting For	Indicates the gathering task dependency for the task activity.
Execution Server	Indicates the MessageStats Server on which the tasks were run. The MessageStats Server name is provided in FQDN format.

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# Extending Gathering Tasks

- [Beyond the Default Gathering](#)
- [Defining Financial Chargeback](#)
- [Gathering Exchange Public Folders](#)
- [Gathering Content and Attachment Information](#)
- [Regathering Exchange Tracking Logs](#)

## Beyond the Default Gathering

After you install the MessageStats components, you typically configure MessageStats to run the Default Gathering task daily. The Default Gathering task collects information about your Exchange organization, servers, mailboxes, and initial message traffic information.

Some gathering tasks are omitted from the Default Gathering task because of their size or demands on server and network resources.

This section describes how you can extend your gatherings to include the following information:

- [Defining Financial Chargeback](#)
- [Gathering Exchange Public Folders](#)
- [Gathering Content and Attachment Information](#)
- [Regathering Exchange Tracking Logs](#)

Additionally, you can gather more detailed information by configuring audits for mailboxes, Internet domains, message subjects, or message delivery time. For information about audits, see [Configuring Audits](#) on page 56.

The tasks that are excluded from the Default Gathering task can use a significant amount of time, server RAM, and processing and network resources. You may want to dedicate a MessageStats Server to run these additional tasks. For information about the gathering tasks that are not included in the Default Gathering task, see [Appendix B: Gathering Task Dependencies](#) on page 114.

You can distribute gathering tasks over one or more MessageStats Servers or task execution servers. During a custom installation, you can install the task processors on a separate server. If you install task processors on more than one server, you can then run specific gathering tasks on each server. For example, if you know that Public Folder Enumeration is a large gathering, you might want to select a non-default Task Execution Server to avoid slowing down the other gatherings.

For each MessageStats installation, there is one MessageStats Scheduler Service that launches the task processors, regardless of where the task processors are located.

## Defining Financial Chargeback

You can use Chargeback reports to calculate messaging traffic and storage chargeback costs. The chargeback amounts can then be distributed back to the departments or groups that incurred the expenses.

To see cost information in the Inventory Chargeback reports, you must define your cost amounts in the Financials property page.

### **To define chargeback amounts**

- 1 Right-click the **Tasks** node of the navigation tree and select **Properties**.
- 2 Click the **Financials** tab.
- 3 Enter the values that should be used in the Chargeback reports:
  - **Cost per MB Stored**
  - **Cost per Internal MB Sent**
  - **Cost per Internet MB Sent**
- 4 Click **Apply**.

## Gathering Exchange Public Folders

MessageStats does not gather public folder information in the Default Gathering task. As a result, the public folder reports do not contain content until you create and run an Exchange Public Folder gathering.

MessageStats provides the following public folder gatherings:

- Exchange Public Folder Gathering is a composite task that includes the following tasks:
  - **Exchange Public Folder Tree Structure Enumeration** collects public folder tree structure using MAPI on public folder databases for Exchange 2010 and collects public folder tree structure on mailbox databases using PowerShell for Exchange 2013 and later.
  - **Exchange Public Folder Tree Structure Analysis** processes the Exchange public folder tree and aggregates replica object count information at the folder level.
  - **Exchange Public Folder Instance Enumeration** collects information about public folders and their content on the source server for Exchange 2010, 2013 and later.

Typically, you run the composite task which includes all the subtasks. However, if required, you can run the individual public folder gatherings separately.

## Prerequisites for public folder gathering

To run a public folder gathering, there must be a public folder database or a mailbox database on the Exchange server that is used as the gathering server for the task. The task credentials account must have membership in the Exchange Public Folder Management security group.

For Exchange 2010, the task credentials must have full access to a mailbox that is used for MAPI logon. You can use the mailbox that is associated with the task credentials.

For more information about the rights and permissions needed to run gatherings, see “Required Rights on Exchange Servers” in the *MessageStats Quick Start Guide*.

For information about what to do if a public folder is located on a remote site, or if the server hosting the public folder is unavailable, see [Troubleshooting a public folder gathering](#) on page 46.

### **To create a public folder gathering**

- 1 Expand the **Exchange Organizations** node and select an organization or a server.
- 2 Right-click an appropriate Exchange source and select **Create Task**.
- 3 From the Template list, select **Exchange Public Folders**.
- 4 Enter a unique name for the task.

- 5 Complete the Task Wizard.

You have the option to select a specific server for MAPI logon for public folders for Exchange 2010. For information about the Legacy Public Folder MAPI wizard page, see [Selecting a Server for Legacy Public Folder MAPI gathering](#) on page 86.

- 6 Click **Finish**.

## Troubleshooting a public folder gathering

The following information can help you troubleshoot some issues that you may encounter when gathering public folder information.

### If a public folder is located on a remote site

By default, when gathering public folder attributes from an Exchange server, MessageStats connects to the Exchange server using the Exchange gathering server defined for the organization.

However, if the public folders are located on an Exchange server that is in a remote site, this method does not gather all the public folder attributes. To gather all the attributes from the remote site, a direct connection to the Exchange server is required.

You can override the gathering server for the specific task and set a direct connection using Legacy Public Folder MAPI dialog in the Create Task wizard.

#### ***Setting a direct connection for an existing public folders task***

- 1 Select the task from the Tasks Summary View.
- 2 Right-click and select **Properties**.
- 3 Step through the wizard to display the Legacy Public Folder MAPI page.
- 4 Clear the **Use Default Configuration** check box.
- 5 Select **I want to use the following server for public folder gathering tasks**.
- 6 Select **Access the Exchange server directly**.
- 7 Click **Next** and click **Finish**.

### If an Exchange server is unavailable

For Exchange 2010 Public Folder gatherings, if one Exchange server that contains a public folder database is unavailable (such as down for maintenance), the gathering for all other Exchange servers that contain a public folder database will complete with warnings.

- If the server is temporarily offline, wait until the server is back online before you run the Exchange Public Folder gathering task.
- If the server has been decommissioned, run the Exchange Organization Structure gathering to remove the server from the database. (Right-click the organization and select **Regather Structure**.)

# Gathering Content and Attachment Information

The content and attachments gathering tasks collect information about the email content and attachments in your Exchange organization. Typically, you use these gatherings to collect detailed data for a few mailboxes that you are investigating.

These gatherings can consume a large amount of processing capacity and memory to gather data, and use a large amount of database space to store data, so they are not included in the default gatherings.

Content and Attachments gatherings are available only for mailboxes and for public folders.

## Required permissions for Content and Attachment gatherings

The account which is used to run a Mailbox Content and Attachment gathering task requires special permissions.

- For Exchange 2010, the account must have Full Mailbox Access to the specific mailbox or to all mailboxes from which you want to gather the content and attachment information.
- For Exchange 2013, 2016, and 2019, the account that is used to run a Mailbox Content and Attachment gathering task must have Exchange impersonation permissions to the target mailboxes.

For Exchange 2010, the account used to run the Public Folder Content and Attachment gathering task also requires access to the public folders. (The Public Folder Content and Attachment gathering is not available for later versions of Exchange.)

For information about how to grant the various permissions and how to configure Exchange impersonation, see the section titled “Rights Required for Specialized Gathering Tasks” in the *MessageStats Quick Start Guide*.

[Gathering Mailbox Content and Attachments](#)

[Gathering Public Folder Content and Attachments](#)

## Gathering Mailbox Content and Attachments

To configure content and attachments gatherings for mailboxes, you must select the mailboxes you want to include in the gathering and define the criteria for the message content and attachment information that you want to gather.

### Prerequisite

You cannot run a Mailbox Content and Attachment gathering unless you have run a Default gathering task.

The account that is used to run the gathering must also have additional permissions. See the previous section titled “[Required permissions for Content and Attachment gatherings](#)”.

### Best Practices

It is recommended that you select 10 mailboxes or less. If you select more than 10 mailboxes, performance can be seriously affected and the MessageStats database can grow substantially.

The average recommended mailbox size is 200 MB. If you want to select more than 10 mailboxes, it is recommended that you create several gatherings with batches of 5-10 mailboxes.

## To create an Exchange Mailbox Content and Attachments gathering

- 1 Expand the **Exchange Organizations** node and select a server.
- 2 Right-click the server and select **Create Task**.
- 3 From the Template list, select **Exchange Mailbox Content and Attachments** and enter a unique name for the task.
- 4 Complete the Task Execution Server, Task Schedule, Task Logging, and Task Credentials information, clicking **Next** after each page.
- 5 Browse the tree to find the appropriate server.
- 6 Browse to find the appropriate mailboxes, and select the items. For details, see [Selecting Mailbox Items](#) on page 49.
- 7 Click **Next**.
- 8 Select an option to indicate the amount of mailbox information that you want to gather:

**Table 1. Options for the mailbox content gathering.**

Option	Description
All content	Collects all content, except body text. To include body text in the gathering, select the <b>Only content that satisfies the following filters</b> option and enter the text that you want included in the gathering.
Only content that satisfies the following filters	For details, see <a href="#">Applying Content Filters</a> on page 49.
No content	If you select the No Content box on the Content Filters page but select some attachments on the Attachment Filters page, MessageStats stores some content information. Since attachments are attached to items in a mailbox, MessageStats must store content information for any item that contains one or more attachments that meet your collection criteria. The content information ensures that attachments can be traced back to their originating items and they can be easily found using native tools outside of MessageStats.

- 9 Click **Next**.
- 10 Select an option to indicate if you want to gather all attachments, some attachments, or no attachments.

**Table 2. Options for the mailbox attachments gathering.**

Option	Description
All attachments	Collects all attachments.
Only attachments that satisfy the following filters	For details, see <a href="#">Applying Attachment Filters</a> on page 50.
No attachments	Collects no attachments.

- 11 Click **Next**.
- 12 If you are collecting from Exchange 2010, you can specify a Client Access Server (CAS) for the gathering if you do not want to use the CAS that was specified for the organization. Click **Next**.
- 13 If you are collecting from Exchange 2013 and later, you can specify an URL to be used by EWS (Exchange Web Services) if you do not want the URL to be detected using the Autodiscover function. Click **Next**.
- 14 Click **Next** and click **Finish**.

When you create a Content and Attachments task, there are additional task property pages that you use for:

- [Selecting Mailbox Items](#)

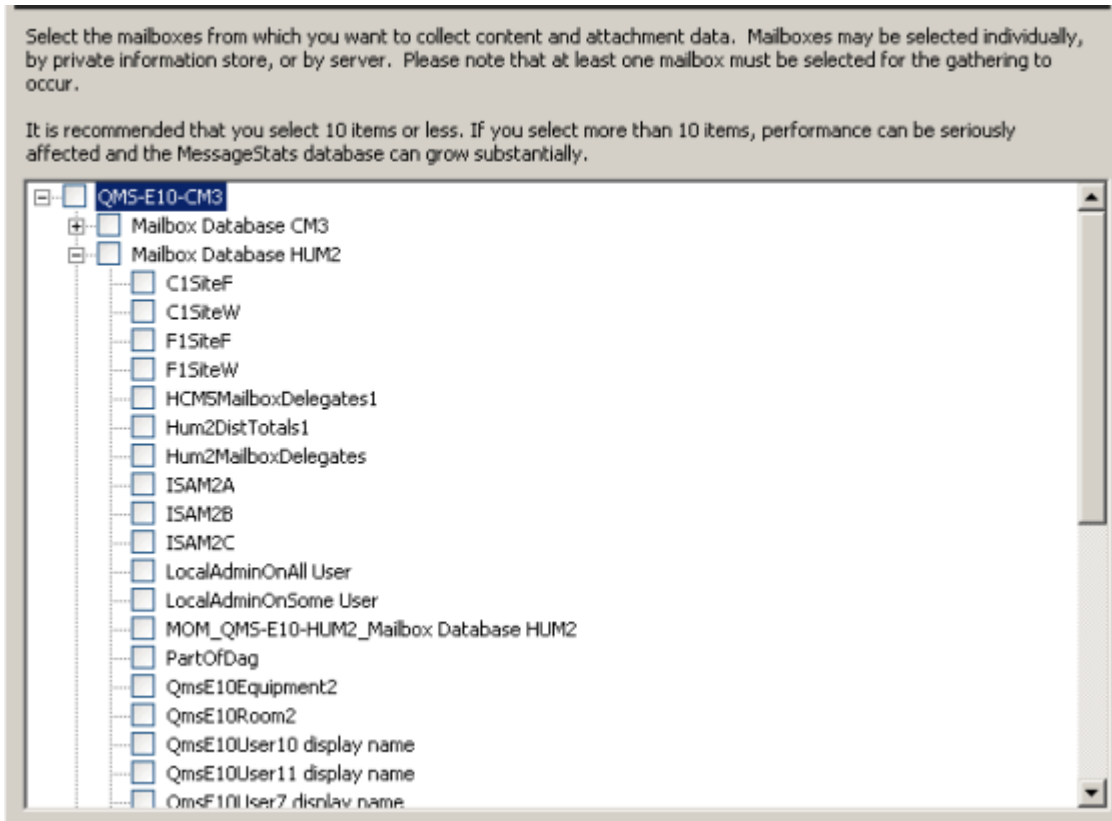


- [Applying Content Filters](#)
- [Applying Attachment Filters](#)

## Selecting Mailbox Items

On the Mailbox Items page, you can select the mailboxes from which you want to collect content and attachment data. You can browse the Exchange organization to select the servers or mailboxes that you want to include in the gathering task.

You can select individual mailboxes from within a server, or you can select the server box to collect content and attachment information from all mailboxes on the server.



It is recommended that you select 10 items or less. If you select more than 10 items, performance can be seriously affected and the MessageStats database can grow substantially. The average recommended mailbox size is 200 MB. If you want to select more than 10 mailboxes, it is recommended that you create the gathering with batches of 5-10 mailboxes.

## Applying Content Filters

Use the Content Filters page to define the mailbox content information that you want to gather. During the gathering, MessageStats processes and stores the content that matches the criteria that you identify.

Content and Attachments gatherings are extremely resource intensive. Carefully consider the content criteria that you specify. Only collect the information that is required and review the Content Filter page often to ensure that the information meets your needs.

**Table 3. Specifying content filters for the Mailbox Content and Attachment gathering.**

Option	Definition
All content	Select this option to collect all mailbox content except for message body text. <b>NOTE:</b> You cannot use this option for body text. To collect information about text that appears in the message body, you must set the filter option and specify the words that you want to audit.
Only content that satisfies the following filters	Select this option to refine the content gathering to include only the content specified by the selected filters.
Subject contains	Enter the text that the subject line of the email must contain to be included. The following rules apply: <ul style="list-style-type: none"> <li>• Wildcards are not supported.</li> <li>• You can enter a list of words separated by spaces. No other delimiters are supported.</li> <li>• Only individual words are audited. Phrases are not supported.</li> <li>• The characters in the word are matched exactly. For example, the word “top” would result in word matches such as: desktop, topology, stop, and topic.</li> </ul>
or size	Specify the size that the email must be greater than, less than, or be equal to.
or number of recipients	Enter the number of email recipients must be greater than, less than, or must equal to be included.
or date	Set the filter to select data that is before, after, or for the specified date.
or body contains	Enter the text that the body of the email must contain to be included.
No Content	Select this option if no mailbox content is to be gathered.

## Applying Attachment Filters

This page defines the attachment information that you want to gather. During the gathering, MessageStats processes and stores the attachments that match the criteria that you identify.

**Table 4. Specifying attachment filters for the Mailbox Content and Attachment gathering.**

Option	Definition
All attachments	Select this option to collect information for all mailbox attachments.
Only attachments that satisfy the following filters	Select this option to refine the gathering to include only the attachments specified by the selected filters.
File name contains	Enter the text that must be contained in the attachment file name.
or file extension contains	Enter the file extension for the attachment to be included in the gathering.
or size	Specify the size that the attachment must be greater than, less than, or be equal to.
No attachments	Select this option if no mailbox content is to be gathered.

## Gathering Public Folder Content and Attachments

To configure content and attachments gatherings for public folders, determine the public folders you want to include and define the criteria for the content and attachment information that you want to gather and store.

## Prerequisites

You cannot run a Public Folder Content and Attachments gathering unless you have run a Default gathering task and an Exchange Public Folder gathering task.

The Exchange Public Folder Content and Attachments task does not support Exchange 2013 and later.

For Exchange 2010, the task credentials must have full access to the logon mailbox specified for the gathering server. You can use the mailbox that is associated with the task credentials. The account must also have membership in the Exchange Public Folder Administrators.

## Best Practices

It is recommended that you select 10 public folders or less. If you select more than 10 public folders, performance can be seriously affected and the MessageStats database can grow substantially. If you want to select more than 10 public folders, it is recommended that you create multiple gatherings with batches of 5-10 public folders.

### To create an Exchange Public Folder Content and Attachments gathering

- 1 Expand the **Servers** node, right-click the server and select **Create Task**.
- 2 From the Template list, select **Exchange Public Folder Content and Attachments** and enter a unique name for the task.
- 3 Complete the Task Execution Server, Task Schedule, Task Logging, and Task Credentials information, clicking **Next** after each page.
- 4 Browse to find the appropriate server and public folder database, and select the items. For details, see [Selecting Public Folder Items](#) on page 52.
- 5 Click **Next**.
- 6 Select an option to indicate the amount of public folder information that you want to gather.

**Table 5. Options for gathering public folder content.**

Option	Description
All content	Collects all content, except body text. To include body text in the gathering, select the <b>Only content that satisfies the following filters</b> option and enter the text that you want to include.
Only content that satisfies the following filters	For details, see <a href="#">Applying Content Filters</a> on page 52.
No content	If you select the No Content box on the Content Filters page but select some attachments on the Attachment Filters page, MessageStats stores some content information. Since attachments are attached to items in a public folder, MessageStats must store content information for any item that contains one or more attachments that meet your collection criteria. The content information ensures that attachments can be traced back to their originating items and they can be found using native tools outside of MessageStats.

- 7 Click **Next**.
- 8 Select a button to indicate if you want to gather all attachments, some attachments, or no attachments.

**Table 6. Options for gathering public folder attachments.**

Option	Description
All attachments	Collects all attachments.
Only attachments that satisfy the following filters	For details, see <a href="#">Applying Attachment Filters</a> on page 53.
No attachments	Collects no attachments.

- 9 Click **Next**.
- 10 You can specify a Client Access Server (CAS) for the gathering if you do not want to use the CAS that was specified for the organization.  
For public folders, you must specify the mailbox that will be used for MAPI logon.
- 11 Click **Next** and click **Finish**.

When you create a Content and Attachments task, there are additional task property pages that you use for

- [Selecting Public Folder Items](#)
- [Applying Content Filters](#)
- [Applying Attachment Filters](#)

## Selecting Public Folder Items

On the Public Folders Items page, select the Exchange 2010 public folders from which you want to collect content and attachment data. You can select individual public folders from within a public folder database, or you can select the Public Folder box to collect information from all the public folders in the public folder database.



## Applying Content Filters

Use this page to define the public folder content that you want to gather. During the gathering, MessageStats processes and stores the content that matches the criteria that you identify.

Content and Attachments gatherings are extremely resource intensive. Carefully consider the content criteria that you are configuring. Only collect the information that is required and review your Content Filter page often to ensure that the information meets your needs.

**Table 7. Specifying content filters for the Public Folder Content and Attachment gathering.**

Option	Definition
All content	Select this option to collect all public folder content except for message body text. <b>NOTE:</b> You cannot use this option for body text. To collect information about text that appears in the message body, you must set the filter option and specify the words that you want to audit.
Only content that satisfies the following filters	Select this option to refine the content gathering to include only the content specified by the selected filters.
Subject contains	Enter the text that the subject line of the message must contain to be included. The following rules apply: <ul style="list-style-type: none"> <li>• Wildcards are not supported.</li> <li>• You can enter a list of words separated by spaces. No other delimiters are supported.</li> <li>• Only individual words are audited. Phrases are not supported.</li> <li>• The characters in the word are matched exactly. For example, the word “top” would result in word matches such as: desktop, topology, stop, and topic.</li> </ul>
or size	Specify the size that the message must be greater than, less than, or be equal to.
or number of recipients	Enter the number of message recipients must be greater than, less than, or must equal to be included.
or date	Set the filter to select data that is before, after, or for the specified date.
or body contains	Enter the text that the body of the message must contain to be included.
No Content	Select this option if no public folder content is to be gathered.

## Applying Attachment Filters

Use this page to define the attachment information that you want to gather. During the gathering, MessageStats processes and stores attachments that match the criteria that you identify.

**Table 8. Specifying attachment filters for the Public Folder Content and Attachment gathering.**

Option	Definition
All attachments	Select this option to collect information for all public folder attachments.
Only attachments that satisfy the following filters	Select this option to refine the gathering to include only the attachments specified by the selected filters.
File name contains	Enter the text that must be contained in the attachment file name.
or file extension contains	Enter the file extension for the attachment to be included in the gathering.
or size	Specify the size that the attachment must be greater than, less than, or be equal to.
No attachments	Select this option if no public folder content is to be gathered.

## Regathering Exchange Tracking Logs

The Default gathering task, which normally is run daily, includes a task that gathers data from Exchange tracking logs. MessageStats also offers a separate Exchange Tracking Log Gathering Task that collects only Exchange tracking logs. You may want to use this gathering task for many reasons, including the following:

- Collecting tracking logs that were missed by regularly scheduled gathering tasks because a server was down

- Collecting archived tracking logs that were not previously gathered
- Collecting tracking logs that were deleted
- Collecting additional information from tracking logs that were previously gathered.

For information about Exchange tracking logs, see [Gathering Exchange Tracking Logs](#) on page 13.

### To create a gathering task to reimport tracking logs

- 1 Select the appropriate Exchange source.
- 2 Right-click and select **Create Task**.
- 3 From the Template list, select **Exchange Tracking Logs** and click **Next**.
- 4 Within **Date Range**, select **Custom** and set the appropriate Start and End dates.
- 5 Click **Next**.
- 6 Complete the rest of the Create Task Wizard as required.

**i** **IMPORTANT:** Depending on the frequency with which you purge archived tracking logs, data may not be available in the archived logs. Ensure that you retain sufficient tracking logs to meet any future reimporting requirements.

## Setting the Tracking Log Date Range

Use the Tracking Log Date Range page to configure the date range properties when you are creating a Default Gathering task or a Exchange Tracking Log gathering task.

**Table 9. Selecting the date range for tracking logs.**

Option	Definition
Date Range	You can select Yesterday, Last 3 Days, Last Week, or Custom.  If you select the Yesterday, Last 3 Days, or Last Week date ranges, the start and end dates are automatically updated to reflect the date range you selected.  If you select the Custom date range, you must enter the start date and end date in the boxes.
Start Date	Click the arrow to select the Start Date from the calendar.
End Date	Click the arrow to select the End Date from the calendar.

## Scenarios for Configuring Date Ranges

Exchange tracking logs provide all the message traffic content for MessageStats Reports. Typically, in a Default Gathering task, you require only one day of tracking logs and you would choose Yesterday. If you configure your Default Gathering to run regularly, the most current tracking logs are gathered and processed into the database.

There may be circumstances when you need more than just the most current tracking log. See the following table for examples of scenarios in which you might want to regather the tracking logs for a specific date range.

**Table 10. Scenarios in which tracking logs are regathered**

<b>Scenario</b>	<b>Description</b>	<b>Procedure</b>
Additional content is required from previously gathered logs	In this scenario, the user has interactively changed the configuration of audit information. A message subject, mailbox, or domain may have been added to the audit list and historical audit information is required. The logs have been previously gathered and processed, but new information is required from the logs.  MessageStats automatically retrieves data from the last seven days, regardless of whether the tracking logs are available on the Exchange server or in archive locations. If you want to reimport more than seven days of logs, ensure that the date range is appropriately set.	<b>To gather additional data from previously gathered logs</b>  <ol style="list-style-type: none"> <li>1 Ensure that the mailboxes, domains, or message subjects have been added to the appropriate audit list.</li> <li>2 Ensure that the Archive Log Directory Share Path on the Server Properties box is accurate.</li> <li>3 Ensure that the logs you intend to gather exist in the archive log directory or the tracking log directory share.</li> <li>4 Create a new task ensuring that you set the dates for the logs that you want to gather.</li> </ol>
Archived logs have not been previously gathered	In this scenario, the user may have manually moved historical tracking logs from the Exchange server to the log archive.  MessageStats has never gathered or processed these logs, but the logs still exist in the archive.	<b>To gather archived data for the first time</b>  <ol style="list-style-type: none"> <li>1 Ensure that the Archived tracking log share path on the Shares tab of the Server Properties dialog box is accurate.</li> <li>2 Ensure that the logs you intend to gather exist in the archived tracking log share.</li> <li>3 Create a task to gather the archived information, ensuring that you set the appropriate dates for the logs you want to gather.</li> </ol>
Tracking logs were inadvertently deleted, and the content must be replaced in the database.	In this scenario, the user may have inadvertently deleted information using Database Management.  After the data is deleted, the user can gather the logs to replace the data.	<b>To gather previously deleted data</b>  <ol style="list-style-type: none"> <li>1 Ensure that the Archived tracking log share path on the Shares tab of the Server Properties dialog box is accurate.</li> <li>2 Ensure that the Tracking log share path on the Shares tab of the Server Properties dialog box is accurate.</li> <li>3 Ensure that the logs you intend to gather exist in the archived tracking log share or the tracking log share.</li> <li>4 Create a task to gather the deleted information, ensuring that you set the appropriate dates for the logs you want to gather.</li> </ol>

# Configuring Audits

- [About Audits](#)
- [Transport-Level Audits](#)
- [Storage-Level Audits](#)
- [Managing Audited Information](#)

## About Audits

Through audits, you can collect a large amount of information that can be used to identify problems, misuse of resources, and system delivery issues. However, the cost of writing the increased volume of data to the database can be expensive. Perform periodic reviews of the audits that you have configured to ensure that they are providing sufficient information to justify the performance impact.

You can configure two types of audits:

- **Transport-level audits**—including specific user mailboxes, usage of specific Internet domains, message subjects, and message delivery times. You select these items for audit through the property pages for a selected Exchange organization. For more information see [Setting Properties for a Specific Exchange Organization](#) on page 67.
- **Storage-level audits**—including mailbox content and attachments and public folder content and attachments. You select items for audit when you create a gathering task using one of the Content and Attachments gathering task templates. For more information see [Gathering Content and Attachment Information](#) on page 47.

## Transport-Level Audits

Transport-level audits use information that is gathered through the Default Gathering task. You select the information to be gathered using specific audit property tabs in the Exchange organization properties. You can specify audit information for auditing mailboxes, Internet sites, and delivery times for messages.

## Auditing Mailboxes

You can audit user mailboxes for email usage by adding mailboxes to the mailbox audit list on the Exchange organization property page. Mailbox auditing allows you to track the sending and receiving of email messages, intended targets, and subject line text.

Due to the way that Microsoft Exchange writes information to the tracking logs, the Mailbox Audit reports display the recipients list as it is created by the mailbox user. Any distribution groups that are included in the recipients list are not expanded to include all members of the distribution group. If the mailbox that is being audited receives a message that was sent to a distribution group, the received messages list does not show that the message was sent to a distribution group instead of directly to the mailbox.

For information about selecting the mailboxes to be audited, see [Identifying Mailboxes for Mailbox Auditing](#) on page 71.



## Auditing Internet Domains

You can create a list of Internet domains that are considered restricted by your email usage policy. MessageStats can audit all tracking logs to identify email traffic to or from the specified domains. If you want more than one Exchange organization to audit for a particular Internet domain, you must configure each Exchange organization individually.

Use Internet domain auditing to track the sending and receiving of Internet email messages, intended targets, and subject line text for a defined list of domains.

For about configuring audits for Internet domains, see [Configuring Internet Domain Auditing](#) on page 73.

## Auditing Message Subjects

Many email viruses have similar text that appears in the message subject line. Being able to see the volume of messages that are sent and received with these subject lines is beneficial in understanding the impact that email viruses can have on an Exchange organization.

In Microsoft Exchange, you must specifically select the **Enabled subject logging and display** option on the Exchange server to include message subjects in an audit. If you do not select this option, the subjects for the audited messages is empty.

For information about configuring audits for message subjects, see [Auditing Subject Text in Messages](#) on page 72.

## Auditing Message Delivery Times

You can use message delivery time auditing to identify messages that take an unusual amount of time to be delivered. When a message takes longer to deliver than the audit threshold that you define, MessageStats records the message originator, recipients, subject, messageID, timestamp, and size.

Ensure that the delivery threshold that you set is large enough so that the audit does not capture too many messages.

When you create a Default Gathering task or Exchange Tracking Logs task, the Delivery Time Threshold dialog box is displayed. You can use it to set a delivery time threshold for the task.

For information about setting a message delivery time threshold for auditing purposes, see [Setting a Threshold for Delivery Time Audits](#) on page 76.

## Storage-Level Audits

The Content and Attachments audits use information gathered through the Exchange Mailbox Content and Attachments and Exchange Public Folder Content and Attachments Gathering Tasks.

## Auditing Mailbox Content and Attachments

MessageStats provides content and attachment audits for mailboxes. You can audit the count and volume information for the items in the mailbox databases on the selected server. You must create a gathering task to collect the content and attachment details from the mailboxes.

For information about creating a gathering task to collect mailbox content and attachment information, see [Gathering Mailbox Content and Attachments](#) on page 47.

After you have run the dependent gathering tasks, you can use the Content Analysis Audit reports to review the audited information. Mailbox Content Analysis Audit reports include the following:

- Audit Mailbox Content for Subject Keyword, Body Keyword, Size, Number of Recipients, or Date
- Audit Mailbox Attachments for File Extension or File Name Keyword

## Auditing Public Folder Content and Attachments

MessageStats can gather mailbox content and attachment information for public folders through audits. You can audit the count and volume information for the items in the public folder database of a selected server.

You must create a gathering task to collect the content and attachment details from the public folders.

For information about creating a public folder content and attachment gathering, see [Gathering Public Folder Content and Attachments](#) on page 50.

After you run the dependent gathering tasks, you can use the Content Analysis Audit reports to review the audited information. Public Folder Content Analysis Audit reports include the following reports:

- Audit Public Folder Content for Subject Keyword, Body Keyword, Size, or Date
- Audit Public Folder Attachments for File Extension or File Name Keyword.

## Managing Audited Information

Audits affect the overall size of your database, as well as affecting gathering performance time. It is recommended that you carefully select the audits that you want to perform, rather than auditing large amounts of information in your organization.

## Estimating Database Growth

Before you define audits, consider the amount of data to be added to the database. You can contact Professional Services to help determine the growth rate of your database based on your MessageStats configuration.

## Effects of Changing Audit Configuration

If you change the configuration settings for audits, MessageStats automatically reimports the tracking logs that already exist or have existed in the database. During the gathering processes, MessageStats determines if any logs must be imported again.

If another import is required, MessageStats searches tracking logs in the following locations:

- The individual server's archive log path
- The individual server's tracking log share
- The mailbox database share
- The system-wide archive log path

The newly gathered audit information is written to the database, supplementing the data that was already gathered.

**i** | **NOTE:** For more information, see [Scenarios for Configuring Date Ranges](#) on page 54.

## Considerations for Performing Audits

To ensure that your audits are efficient and provide the results that you want, consider the following factors:

- Audits cannot be run for mailboxes that appear on the Excluded Mailbox list.
- Audits are only run for the last seven days of Exchange logs and new logs as they become available. To perform audits on archived logs, you must reimport the logs. For more information, see [Scenarios for Configuring Date Ranges](#) on page 54.

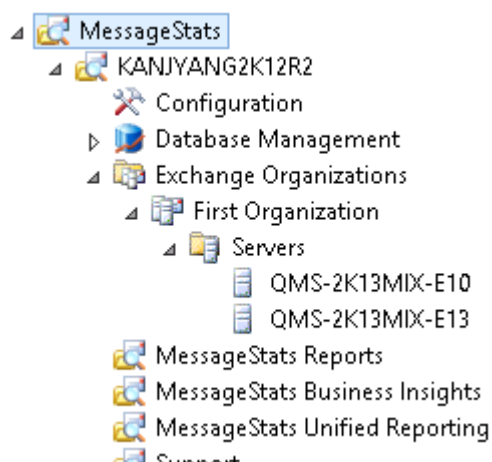
- To include message subjects in the audit, you must select the Enabled subject logging and display option for the Microsoft Exchange server. If you do not select this option, no subjects appear in the audited messages.
- Mailboxes that you want to audit must exist in the MessageStats database. If you want to audit a mailbox that does not currently exist in the database, you must enter the internal mailbox identification information (including the Name, Display Name, Legacy Distinguished Name, and the Email Address) into the Add New Mailbox to Audit dialog box.

# Setting MessageStats Server Properties

- [Configuring the MessageStats Server](#)
- [Specifying the MessageStats Database Settings](#)
- [Configuring Service Logging](#)
- [Setting Up Archiving for Service Logs](#)
- [Specifying Reports IIS Settings](#)
- [Updating Security Credentials for the Scheduler Service](#)

## Configuring the MessageStats Server

The server on which you installed the MessageStats Scheduler Service is called the MessageStats Server. You might also install the MMC-based client console and task processors on the same server. In the treeview, the MessageStats Server is the child node of the root.



The properties tabs associated with the MessageStats Server contain the settings for the MessageStats database, the service (application) logs, and the IIS server on which the MessageStats web-based reports are installed.

### To access the MessageStats Server property tabs

- 1 Select the MessageStats Server in the treeview.
- 2 Right-click and select **Properties**.
- 3 Select the tab for the properties tab that you want.

The following MessageStats Server properties tabs are available:

- **Database.** See [Specifying the MessageStats Database Settings](#) on page 61.

- **Service Logging.** See [Configuring Service Logging](#) on page 61.
- **Service Logging Archive.** See [Setting Up Archiving for Service Logs](#) on page 62.
- **Reports.** See [Specifying Reports IIS Settings](#) on page 63.
- **Scheduler Service Credentials.** See [Updating Security Credentials for the Scheduler Service](#) on page 63.

## Specifying the MessageStats Database Settings

The Database tab displays the MessageStats database location, the timeout settings, and the maximum number of database records per database update.

**Table 1. MessageStats database settings.**

Option	Definition
Locate the database on the following SQL server	Defines the location of the MessageStats database. By default, the Database tab contains the name of the database server that you specified during installation. You can edit the location if required.
Long command timeout (in seconds)	Defines the amount of time after which the task processors will time out for the gathering commands. For a long command (such as most of the gathering tasks), the default is 3600 seconds (or one hour).
Short command timeout (in seconds)	For short commands (such as read or write tasks), the default is 60 seconds.
Use the long command timeout when connecting to the database	Used only if you want to use only the long command timeout value.
Maximum number of records per update	Sets the maximum number of database records for a database update.

## Configuring Service Logging

MessageStats creates log entries during several processes. You can set scheduler service logging to record the activity of the scheduler service on the MessageStats server.

These logs can help diagnose problems. If you contact Quest Support for assistance, you may be asked to enable or change the logging level of these logs to assist in resolving your problem.

**Table 2. Setting logging for the MessageStats scheduler service.**

Option	Definition
Enable service logging	Select this option to identify the location and detail level of the logs. The Enable service logging check box is cleared by default.
Store service logs in	Specify the path location in which the log files should be stored.
Log detail level	Set the level of detail that should be included in the log files. For information about the different levels of details, see <a href="#">About Logging Levels</a> on page 62.
Record errors in the Windows Application Event Log	Select this option and MessageStats also records errors in Windows Application Event logs.

You can also set logging at the task level, using the Task Logging tab.

## About Logging Levels

You can define the logging level for your service logs. The following log levels are available, from the most detailed to the least detailed:

**Table 3. Logging levels for the MessageStats scheduler service.**

Log Level	Detail
Trace	Trace level logging is extremely detailed logging that includes errors, warnings, and status messages, and also low-level event details. Trace logging is only used with custom components provided by MessageStats development for diagnostic purposes. This level of logging can generate large log file and can affect system performance.
Debug	Debug level logging includes errors, warnings, and status messages, and also low-level event details. Quest Support might ask you to set logging to the debug level to identify and resolve an issue. Use debug-level logging only at the request of Quest Support, since the log files can grow rapidly and can affect system performance. These logs contain very detailed entries.
Status	Status level logging includes warnings and errors, as well as the regular flow of major events within MessageStats. Use the Status level for a new installation to include more detailed logs.
Warning	Warning level logging includes errors that appear at the Errors level. The Warning level also includes errors that occurred but from which MessageStats recovered and continued gathering. Use this level for established and stable implementations.
Errors	Errors level logging includes errors that caused a gathering task to terminate.

It is recommended that you periodically remove obsolete logs. In general, retaining one month of service logs should be sufficient for most enterprises.

The configuration for service logs does not apply to the QMSCompress.log files. The compression logs are external to the MessageStats product. The Gathering Status report includes Errors and Warning details regardless of the detail level that you selected on the General tab.

## Setting Up Archiving for Service Logs

As part of service logging configuration, you can enable and configure service log archival. Use the Service Logging Archive tab to configure the following.

**Table 4. Service logging archive settings.**

Option	Definition
Enable archiving for MessageStats Service logging	Select the option to specify the time that you want to retain the service log files, and the method for handling the files once the time limit is reached. The check box is cleared by default.
Number of months to keep	Specify the length of time, in months, that you want to keep the service log files.
Time to execute archiving	Set the time at which you want the archiving process to be run.
Service Logging Management Method	Select one of the following options to handle the service logs once the time limit for keeping them has been reached:  Select <b>Delete Files</b> if you want the archived service log files to be deleted when the number of months you selected to retain the files has expired.  Select <b>Move Files to Backup Location</b> to copy the files to the path location that you specify and delete them from the MessageStats server.  Select <b>Compress Files to Backup Location</b> to compress the files and copy them to the path location that you specify. The compression option uses the PKZIP 2.0 file archive format.

You can also set log archiving at the task execution server level, using the Task Logging Archive tab.

# Specifying Reports IIS Settings

The Reports tab contains the location of the MessageStats Reports IIS server that you specified when you installed MessageStats. You can use the tab if you need to modify the reports server settings.

Table 5. MessageStats reports server settings.

Option	Definition
MessageStats Reports IIS Server	Shows the IIS server used for MessageStats Reports. If you performed a complete installation, the MessageStats Reports IIS server is the local host. If the MessageStats Reports component is installed on another server, you must supply a valid DNS name (such as a NetBIOS name or a fully qualified domain name).
Port Number	Used to change port number that is used to connect to the MessageStats Report IIS server.
Use HTTPS	Used if you want MessageStats Reports to support secure pages.

## Updating Security Credentials for the Scheduler Service

When you install MessageStats, the account that you specify during installation is used, by default, to run the MessageStats Scheduler Service. This is the MessageStats service account.

At a later date, you might need to update the service account. For example, the account might be invalid because it does not exist or is disabled, or the password might have been changed. Or you might wish to run the scheduler service under a different account than the account that was used to install the product.

**i | IMPORTANT:** To use this option, you must be viewing this property tab in a MessageStats client console that is installed on the same computer on which the MessageStats Scheduler Service is installed.

## Problems Caused by Incorrect Credentials

If the password for the service account has been changed, you might see an error message “Unable to Connect to MessageStats Service”. In this case, you could use this property tab to update the password.

## What Gets Updated

When you modify the security credentials for the MessageStats Scheduler Service, the changes are made in two places:

- The MessageStats Scheduler Service (Windows Service) credentials are changed. The credentials can also be accessed in the Windows Service Control Manager (SCM) and are used to start the MessageStats Scheduler Service.
- The MessageStats Scheduler Service COM object credentials are changed. The credentials can also be accessed in the DCOM Config section of Windows Component Services and are used to instantiate the MessageStats Scheduler Service COM object.

**Table 6. Resetting credentials for the MessageStats scheduler service.**

<b>Option</b>	<b>Definition</b>
Account	<p>Displays the existing account set as the MessageStats Scheduler Service account.</p> <ul style="list-style-type: none"><li>• Leave the account if only the password must be changed.</li><li>- OR -</li><li>• Enter a new account under which the MessageStats Scheduler Service is to be run.</li></ul> <p><b>NOTE:</b> The new account must already be a member of the MessageStats Admin local group. The account must also be a member of the local Administrator group on the server.</p>
Password	Enter the password for the service account.
Confirm Password	Re-enter the password to confirm it.

After you have changed the credentials, the console must be closed and opened again for the change to be implemented.



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# Setting Configuration Properties

- [Setting General Configuration](#)
- [Creating Server Roles for Exchange](#)

## Setting General Configuration

The Configuration node provides access to general configuration, such as creating custom server roles for Exchange servers.

Through the Configuration node, you can perform configuration activities such as:

- Creating server roles that can be used to identify and group Exchange servers in MessageStats reports. See [Creating Server Roles for Exchange](#) on page 65.

### **To access the general configuration property tabs**

- 1 Select the **Configuration** node in the treeview.
- 2 Select the tab you want in the right pane.

## Creating Server Roles for Exchange

In MessageStats, server roles that reflect the standard built-in Exchange server roles are already defined and available for use.

MessageStats retrieves the server roles for a server from Active Directory, assigns a matching built-in server role value in MessageStats, and identifies the role as “discovered” in the server properties. You cannot change a server role value for a discovered server role.

You can create additional custom server roles to apply to servers using the Custom Server Roles tab.

### **To add a custom server role**

- 1 Click **Add** and enter a descriptive server role.
- 2 Click **OK**.

You cannot modify or delete pre-defined server roles. You can modify or delete roles that are identified as custom roles.

You assign server roles to a server through the properties tabs for an individual Exchange server. For more information see [Assigning a Server Role for Reports](#) on page 82.

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# Setting Exchange Organization Properties

- [Introducing Exchange Organization Properties](#)
- [Setting General Organization Properties](#)
- [Selecting a Tracking Log Archive Location](#)
- [Setting Properties for a Specific Exchange Organization](#)
- [Identifying Internal SMTP Namespaces](#)
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- [Viewing Task Membership for an Organization](#)
- [Gathering Distribution Group Membership Information](#)
- [Selecting Servers for Tracking Log Archiving](#)

## Introducing Exchange Organization Properties

For MessageStats to perform optimally for your implementation, ensure that the values in the following properties dialog boxes are accurate:

- ***Setting General Exchange Properties***

You can access a general property tab from the Exchange Organizations node which is used for all Exchange organizations.

For example, you can select a tracking log archive location for the MessageStats archiving feature. For information see [Selecting a Tracking Log Archive Location](#) on page 67.

- ***Setting Properties for a Specific Exchange Organization***

By selecting a specific Exchange organization you can access properties tabs that allow you to configure properties that apply to the selected organization.

For example, you can set up audits for mailboxes, email subjects, and domains. You can identify ranges of IP addresses that should be considered as internal for the Exchange organization. You can specify additional internal SMTP namespaces for your organization. You can define delivery time thresholds at the Exchange organization level or select specific Exchange servers for organization gathering tasks.

For information, see [Setting Properties for a Specific Exchange Organization](#) on page 67.

# Setting General Organization Properties

From the Exchange Organizations node in the treeview, you can set basic properties that are not specific to any one Exchange organization.

Specifically you can select the archive location for your tracking logs if you are using the MessageStats archiving feature.

For information about setting a custom location for archived tracking logs, see [Selecting a Tracking Log Archive Location](#) on page 67.

## Selecting a Tracking Log Archive Location

If you are archiving the Exchange tracking logs, you can specify the location in which to archive the tracking logs using the Tracking Log Archive property tab.

### *To select a custom archive share location*

- 1 Select the **Exchange Organizations** node in the treeview.
- 2 Right-click and select **Properties**.
- 3 Specify the share to which the tracking logs are to be archived.
- 4 Click **Apply**.

You can select the servers for which the tracking logs are to be archived using the Tracking Logs tab in the properties for a specific Exchange organization. For more information, see [Selecting Servers for Tracking Log Archiving](#) on page 81.

# Setting Properties for a Specific Exchange Organization

The parameters that you set for a specific organization are used as the default configuration for the organization-level tasks that you create for that organization.

- **SMTP namespaces**—You can modify internal SMTP namespaces to ensure that, when the task processors are processing the tracking logs, traffic is correctly recorded as internal or external.
- [Identifying Internal SMTP Namespaces](#)
  - **Internal subnets**— Messages sent directly through SMTP to an Exchange server are usually counted as “external” in reports. You can identify the IP addresses used by your company so that internal messages submitted directly through SMTP are counted as “internal”.
- [Identifying Internal IP Addresses](#)

- **Audits**—Specify the mailboxes, email subjects, and Internet domains that you want to audit. The task processors collect the extra audit data when they process the Exchange tracking logs.
- [Identifying Mailboxes for Mailbox Auditing](#)
- [Auditing Subject Text in Messages](#)
- [Configuring Internet Domain Auditing](#)
- [Setting a Threshold for Delivery Time Audits](#)
- **Mailbox exclusions**—You can exclude certain mailboxes from mailbox statistics reporting (other than mailbox size).
  - [Excluding Mailboxes from Gatherings](#)
- **Delivery time thresholds**—Set delivery time thresholds to allow the MessageStats task processors to identify messages that exceed the threshold during the tracking log processing.
  - [Setting a Threshold for Delivery Time Audits](#)
- **Exchange servers for gatherings and organization task membership**—You can change the Exchange connection server for the organization or specify a gathering server for specific organization-level gathering tasks.
  - [Changing the Exchange Connection Server](#)
  - [Selecting a Separate Gathering Server](#)
  - [Viewing Task Membership for an Organization](#)
- **Distribution group membership**—You can set whether distribution group membership information is gathered for the organization.
  - [Gathering Distribution Group Membership Information](#)
- **Tracking log archiving**—You can select Exchange servers in the organization for which the tracking logs are to be archived.
  - [Selecting Servers for Tracking Log Archiving](#)

By configuring properties for a specific Exchange organization, you apply them to all the servers within the organization.

### **To access Exchange Organizations property tabs**

- 1 Expand the **Exchange Organizations** node in the treeview and select a specific Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the tab for the properties tab that you want.

## Identifying Internal SMTP Namespaces

MessageStats reports on your internal and external email traffic. Within the MessageStats task processors, a component enumerates the SMTP domains in the Recipient Policies and attempts to determine which namespaces are internal to an organization. The component also checks the domains in the primary and secondary SMTP addresses of mailboxes.

You can use the SMTP Namespaces tab to ensure that all internal SMTP namespaces are correctly identified and to ensure that MessageStats can accurately report internal and external email traffic.

- If you add a SMTP namespace to the list, MessageStats includes the email to and from the namespace in the internal mail traffic reports.
- If you clear a SMTP namespace on the list, the namespace is considered external and email to and from the namespace appears in external mail traffic reports.

For more information about how MessageStats report internal and external email traffic, see Appendix A in the *MessageStats Reports User Guide*.

## Specifying Additional SMTP Namespaces

Though MessageStats automatically populates the SMTP namespace list, if any internal SMTP namespaces are missing, you can add them. An SMTP namespace consists of two or more parts (technically labels), separated by dots. The top-level namespace is the right-most label and any children of the namespace are the labels to the left. MessageStats includes parent namespaces and child namespaces according to the level of namespace that you enter.

For example, if you entered Blackbox.com, MessageStats captures information for both Westland.Blackbox.com and Blackbox.com. However, if you explicitly enter Westland.Blackbox.com, MessageStats does not capture Blackbox.com in the Internal Namespace Distribution report.

### **To add SMTP namespaces to the list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **SMTP namespaces** tab.
- 4 Click **Add**.
- 5 Enter an SMTP namespace in the SMTP namespace box and click **OK**.
- 6 Click **OK**.

### **To clear SMTP namespaces from the list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **SMTP namespaces** tab.
- 4 Click the column heading to sort the list:
  - in alphabetic order
  - ordered with unchecked namespaces first
  - in reverse alphabetic order
  - ordered with checked namespaces first
- 5 Select the SMTP namespace and click to clear the check box.
- 6 Click **OK**.

### **To edit SMTP namespaces**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **SMTP namespaces** tab.
- 4 Click the column heading to sort the list:
  - in alphabetic order
  - ordered with unchecked namespaces first
  - in reverse alphabetic order
  - ordered with checked namespaces first
- 5 Select the SMTP namespace that you want to edit and click **Edit**.
- 6 Edit the namespace in the SMTP namespace box and click **OK**.

To make changes to multiple namespaces, you can select a group of namespaces in the list, right-click and select the option you want.

# Identifying Internal IP Addresses

MessageStats provides reports that show both internal and external email traffic. By default, no IP addresses are identified as “internal” so this means that SMTP-submitted messages are counted as “external” in the following reports:

- Organizations—Subject Sent Audits
- Servers—Server Activity—Advanced Details: Message Submission field
- Servers—Server Activity Internal vs. External
- Servers—Server Message Sizes Sent Distribution
- Mailboxes—Mailbox Top Senders and Receivers
- Mailboxes—Mailbox Activity
- Mailboxes—Mailbox Profile
- Mailboxes—Mailbox Sent Audits
- Mailboxes—Mailbox Sizes Sent Distribution
- All Distribution Group activity reports
- All Mail Contact Reports

To identify all your internal IP subnets, use the Internal Subnets tab. The messages that are submitted through SMTP from those IP addresses will then be correctly reported as “internal” messages.

Using this property page, you can specify either individual IP addresses or a range of IP addresses that you want to identify as internal to your organization.

## To identify internal IP addresses

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Internal Subnets** tab.
- 4 Click **Add**.
- 5 Specify an IP address or a range of IP addresses that you want treated as internal for reports.

**Table 1. Entering the IP addresses that should be treated as internal.**

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Enter a single IP address under the <b>From</b> heading.</li></ul>   | <p>You can specify * as a wildcard character for part of the IP address if necessary.</p> <p>For example, you could enter 10.4.59.* in the field. This would result in IP addresses 10.4.59.0 to 10.4.59.255</p> |
| - OR -   |  |
| <ol style="list-style-type: none"><li>1 Enter the first IP address in a range of addresses, under the <b>From</b> headings</li><li>2 Select the <b>To</b> check box and enter a last IP address for a range.</li></ol> | <p>If you want to specify a wildcard (*) as part of the <b>To</b> address, you must enter a specific number in the corresponding part of the address in the <b>From</b> field.</p>                               |

- 3 Click **OK**.

# Identifying Mailboxes for Mailbox Auditing

You can audit user mailboxes for email usage. After you add mailboxes to the mailbox audit list, you can use mailbox auditing to track the sending and receiving of email messages, their intended targets, and subjects.

**i** | **NOTE:** If you try to audit excluded mailboxes, the Audit reports have no content. For more information, see [Excluding Mailboxes from Gatherings](#) on page 74.

Due to the way that Microsoft Exchange logs information to the tracking logs, the Mailbox Audit reports display the recipients list as it is created by the mailbox user. Any distribution groups that are included in the recipients list are not expanded to include all members of the distribution group.

If a mailbox that is being audited receives a message that was sent to a distribution group, the received messages list does not indicate that the message was sent to a distribution group. However, it does show that the mailbox received the message.

The list of mailboxes that appears in the mailbox auditing functionality is populated by the mailboxes that have been gathered from the Exchange organization and stored in the MessageStats database.

For information about managing audited information, see [Managing Audited Information](#) on page 58.

## Selecting the Mailboxes to be Audited

The Mailbox Auditing tab of the organization Properties displays the mailboxes that are currently being audited. You can use the Mailbox Auditing tab to make changes to the audit list.

The browser in the dialog box lists all mailboxes that exist in the MessageStats database. If you have not completed a gathering, the browser list is empty. You can select more than one mailbox from the list.

**Table 2. Selecting mailboxes to audit.**

Option	Definition
Select Mailbox	Select this option and select one or more mailboxes that are listed in the browser list.
Enter Mailbox Detail	Select this option if you know the display name, mailbox distinguished name, and mailbox email for the mailbox. You can enter the information instead of browsing through the list of mailboxes. You cannot select multiple mailboxes that you entered manually.
Display Name	Enter the mailbox display name.
Mailbox Distinguished Name	Enter the mailbox distinguished name (DN).
Mailbox Email	Enter the mailbox email.

### **To add mailboxes to the audit list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Mailbox Auditing** tab and click **Add**.
- 4 Click **Select Mailbox** to select one or more mailboxes from the browser list and click **OK**.

The list is populated with the mailboxes that have been gathered from the Exchange organization and are stored in the MessageStats database.

- OR -

Click **Enter Mailbox Detail**, enter the specific mailbox information, and then click **OK**.

### **To edit mailboxes on the audit list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.

- 2 Right-click and select **Properties**.
- 3 Select the **Mailbox Auditing** tab.
- 4 Select the mailbox you want to change and click **Edit**.
- 5 Change the details as required and then click **OK**.

#### ***To remove mailboxes from the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Mailbox Auditing** tab.
- 4 Select the mailbox you no longer want to audit.
- 5 Click **Remove** and click **Yes** to confirm.
- 6 Click **OK**.

## Auditing Subject Text in Messages

Many email viruses that exist have similar text that appears in the subject of the message. Viewing the volume of messages that are sent and received with these subject lines is beneficial in understanding the impact that email viruses can have on an Exchange organization.

Message Subject Auditing allows you to enter text that can be compared to a message subject line. MessageStats compares the text you specified to each message subject and captures the message if any part of the text is contained in the subject line.

If a message satisfies the subject criteria, MessageStats records the information for the message. This information includes originator, recipients, subject, messageId, timestamp, and size.

## Prerequisites

In Exchange, you must have enabled message subject logging on the Exchange server to include message subjects in the audit. If you do not select this option, the subjects for the audited messages are empty.

If you want to audit a message subject in more than one Exchange organization, you must configure each Exchange organization individually.

## Entering the Subject Text to be Audited

The Message Subject Auditing tab displays the subject text words that are currently being audited and allows you to change the audit list.

When identifying the audit text, be very specific. The less explicit you are, the greater the number of captured messages. As the number of captured messages increases, the more time it takes to complete the gathering.

#### ***To add message subject text to the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Subject Auditing** tab and click **Add**.
- 4 Enter the subject text to be included in the audit.
- 5 Click **OK**.



### ***To edit message subject text in the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Subject Auditing** tab.
- 4 Select the subject text you want to change and click **Edit**.
- 5 Change the subject message text as required and click **OK**.

### ***To remove message subject text from the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Subject Auditing** tab.
- 4 Select the subject text you no longer want to audit and click **Remove**.
- 5 Click **OK**.

## **Configuring Internet Domain Auditing**

Sometimes message traffic between your Exchange organization and some Internet domains can constitute inappropriate email use. You can create a list of Internet domains that are considered restricted by your email usage policy.

MessageStats can audit all tracking logs to identify email traffic to or from the specified domains, their intended targets, and subjects for a defined list of domains. To audit a particular Internet domain for more than one Exchange organization, configure each Exchange organization individually.

The Domain Auditing tab displays the domains that are currently being audited and allows you to make changes to the audit list.

### ***To add Internet domains to the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select **Domain Auditing**.
- 4 Click **Add**.
- 5 Enter the name of the domain you want to add to the list.

Enter domain names at the level you want to ensure that appropriate information is audited. A domain name usually consists of two or more parts (technically labels), separated by dots. The top-level domain is the right-most label and any subdomains are the labels to the left. MessageStats includes domains and subdomains according to the level of domain name you enter.

For example, if you entered DomainA.com, MessageStats captures both ChildDomain.DomainA.com and DomainA.com in the audit. However, if you entered ChildDomain.DomainA.com, MessageStats does not capture DomainA.com.

- 6 Click **OK** to save the domain to the list.

### ***To edit Internet domains on the audit list***

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select **Domain Auditing**.
- 4 Select the domain and click **Edit**.

- 5 Make any changes and click **OK**.

#### **To remove Internet domains from the audit list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select **Domain Auditing**.
- 4 Select the domain and click **Remove**.

## Excluding Mailboxes from Gatherings

You can exclude specific mailboxes from the gathering process. There might be mailboxes in your enterprise that generate a large volume of email, but you may not want to include these mailboxes as part of your usual email traffic.

For example, you might have an infrastructure monitoring application that generates notifications by email. The traffic generated by this application could be excluded from your overall analysis of messaging traffic generated by users.

To exclude mailboxes, MessageStats performs a text comparison between the originator and all recipients and the text that you enter in the Mailbox Exclusions tab. MessageStats does not recognize aliases or other distinguished names (DNs) when excluding mailboxes.

The Mailbox Exclusions tab contains a list of the excluded mailboxes and allows you to add, edit, or delete mailboxes.

## How Exclusions Affect Reports

Mailbox exclusions do not apply to reports that include structural properties, such as Mailbox Sizes and Mailbox Quotas. These reports include data for all mailboxes, regardless of the mailbox exclusion status. If you audit a mailbox that appears in the excluded mailbox list, no audit information is available. The following reports do not contain data for excluded mailboxes:

- Mailbox Auditing, Subject Auditing, and Domain Auditing
- Mailbox Activity
- Top Users
- Top Internet Users

To identify the mailboxes that you do not want to include in message traffic reports, add mailboxes to the exclusion list. The dialog box lists all mailboxes that exist in the MessageStats database.

You can select more than one mailbox from the list or select a contiguous group of mailboxes from the list.

You can select a continuous group of mailboxes in the list, such as health mailboxes, specific mailboxes, or a single mailbox to be excluded.

#### **To exclude a block of mailboxes**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Exclusions** tab and click **Add**.
- 4 Select the first mailbox in the group.
- 5 Hold down the **SHIFT** key, and click the down arrow to scroll down the list until you reach the last mailbox in the group.
- 6 Click **Apply** and click **OK**.

### **To exclude multiple selected mailboxes**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Exclusions** tab and click **Add**.
- 4 Select the first mailbox.
- 5 Hold down the **CTRL** key and select the mailbox you want.
- 6 Repeat step 5. until you have selected all the mailboxes.
- 7 Click **Apply** and click **OK**.

### **To exclude individual mailboxes from gatherings**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Exclusions** tab and click **Add**.
- 4 Click **Select Mailbox** to select mailboxes from the browser list.

- OR -

Click **Enter Mailbox Detail** and enter the specific mailbox information in each field.

**Table 3. Specifying mailboxes when excluding mailboxes from gatherings.**

<b>Option</b>	<b>Definition</b>
Select Mailbox	Select this option and select one or more mailboxes that are listed in the browser list.
Enter Mailbox Details	Select this option if you know the display name, mailbox distinguished name, and mailbox email for the mailbox. You can enter the information instead of browsing through the list of mailboxes. You cannot select multiple mailboxes that you entered manually.
Display Name	Enter the mailbox display name.
Mailbox Distinguished Name	Enter the mailbox distinguished name (DN).
Mailbox Email	Enter the mailbox email.

- 5 Click **Apply** and click **OK**.

### **To edit the excluded mailboxes list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Exclusions** tab.
- 4 Select the excluded mailbox that you want to edit and click **Edit**.
- 5 Edit the excluded mailbox and click **OK**.
- 6 Click **OK**.

### **To remove mailboxes from the exclusion list**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Message Exclusions** tab.
- 4 Select the excluded mailbox that you want and click **Remove**.

- 5 Click **Yes** to confirm.
- 6 Click **OK**.

## Setting a Threshold for Delivery Time Audits

You can audit messages that take an unusually long time to be delivered to the recipients. Using the Delivery Time Audit tab, you can enable message time auditing and set a threshold for message delivery times.

When a message takes longer to deliver than the audit threshold, it is reported in the Message Delivery Audit report in MessageStats Reports under the Servers | Delivery Times nodes.

### To set a delivery time threshold for message traffic

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Delivery Time Audit** tab.
- 4 Select the **Enable auditing for message delivery times** box.
- 5 Enter an appropriate threshold value:

Option	Definition
Threshold value for time to deliver a message (in seconds)	<p>Indicates the number of seconds you want to use as the threshold for message delivery times. If you do not set a number, MessageStats sets a default of thirty seconds.</p> <p>The Delivery Time reports show the average delivery time and the number and percentage of messages that are under this threshold. The threshold is displayed on the appropriate threshold report graphs.</p>

Specify a sufficiently large time threshold to limit the number of messages that are captured for audit purposes. If you set a low number, your database size can increase rapidly.

- 6 Click **OK**.

## Changing the Exchange Connection Server

Using the Connection Server tab, you can change the Exchange server that MessageStats uses as the access point to enumerate an Exchange organization.

The Connection Server property tab is used to set the root default connection server for the entire organization. Initially, this is the Exchange server that you selected when you created the connection to the Exchange organization.

This tab only allows you to change the connection server for the current organization. To connect to additional organizations, see [Connecting to an Exchange Organization](#) on page 25.

To select a different Exchange server from which to gather information, use the Gathering Server property tab. However, the server specified as the Connection Server is always used as the connection server for the Exchange Organization Structure gathering task.

The Exchange Organization Structure task runs automatically overnight to update the organization structure information in the database. You can also manually run the Exchange Organization Structure task, either using the Regather Structure option in the shortcut menu when you right-click an organization, or by selecting the task template in the Task Wizard at the organization level.

## Prerequisites

For Exchange 2010 and Exchange 2013, the Exchange server must have the Client Access (CAS) role installed. You must also specify an Exchange mailbox for MAPI logon. The account that is used to run gathering tasks must have full access to the mailbox. In most cases, you would use the mailbox that is associated with the task credentials.

**i** | **NOTE:** Though MAPI is used for most Exchange 2013 gatherings, for a Mailbox Content and Attachment gathering, Exchange 2013 uses EWS (Exchange Web Services). For more information, see [Required permissions for Content and Attachment gatherings](#) on page 47.

For Exchange 2016 or Exchange 2019, the Exchange server must have the Mailbox role and the gathering account must be a member of the View-Only Organization Management group.

### To change your Exchange organization connection server

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Connection Server** tab.
- 4 Select all the versions of the Exchange mailbox servers that exist in the organization.
- 5 Specify the connection server as follows:

**Table 4. Information needed for different organization configurations.**

<b>If the organization contains</b>	<b>Enter the following information</b>
At least one public folder or mailbox server that is running Exchange 2010.	<ol style="list-style-type: none"><li>1 Enter the Exchange NETBIOS name for an Exchange 2010 CAS server.</li><li>2 Specify a mailbox in one of the following formats:<ul style="list-style-type: none"><li>▪ Display Name</li><li>▪ Alias</li><li>▪ SMTP Address</li></ul></li></ol> <p><b>NOTE:</b> If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as <code>FirstName.Lastname@domain.com</code>.</p>
At least one public folder or mailbox server that is running Exchange 2013.	<ol style="list-style-type: none"><li>1 Enter the NETBIOS name for an Exchange 2013 CAS server.</li><li>2 Specify a mailbox in one of the following formats:<ul style="list-style-type: none"><li>▪ Display Name</li><li>▪ Alias</li><li>▪ SMTP Address</li></ul></li></ol> <p><b>NOTE:</b> If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as <code>FirstName.Lastname@domain.com</code>.</p>
At least one mailbox server that is running Exchange 2016 or 2019.	Enter the Exchange NETBIOS name for an Exchange 2016/2019 Mailbox server.

The Exchange 2010 / 2013 mailbox is used for MAPI logon to collect mailbox information. The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.

**i** | **TIP:** MessageStats has provided a PowerShell script that allows you to set a user account with full access rights to a specific mailbox. You can find the script in the MessageStats installation directory (by default this is `C:\Program Files\Quest\MessageStats`) in a folder called `Scripts`

If you have an Exchange mixed environment that includes Exchange 2010 servers that contain public folders, you must set an Exchange 2010 server for legacy public folder gatherings in the organization properties after you connect to the organization. For details, see [Selecting a Server for Legacy Public Folder Gathering](#) on page 80.

For Exchange 2016/2019, PowerShell is used instead of MAPI for the mailbox and public folder gatherings. For Exchange 2013 and later, Exchange Web Services (EWS) is used for the mailbox contents and attachments gatherings. (Public folder content and attachment gatherings are not available for Exchange 2016 or Exchange 2019.)

3 Click **Validate**.

MessageStats validates whether the specified task credentials (as shown under Advanced Properties) have access to the Exchange server and, for Exchange 2010 and 2013, can log on to the specified mailbox.

4 If the task execution server for the Exchange organization and the credentials used to run tasks do not change, click **Apply**.

- OR -

To change the task execution server or to specify different task credentials, select **Configure**.

- a To associate the Exchange organization with a different task execution server, select a server in the **Execution Server** box.
- b To use different credentials than the account that is specified as the Default Task Security Content, select **Specify Explicit Credentials**.
- c Enter an account and password that have access to the specified Exchange connection server and, if applicable, mailbox.
- d Click **Accept**.

5 If the validation is successful, click **OK**.

## Selecting a Separate Gathering Server

For Exchange 2010 and 2013, you have the option of selecting an Exchange server that is different from the specified Exchange connection server to run gathering tasks that are initiated at an organization level.

For example, you might want to run organization-level tasks, such as the Exchange Mail Contacts gathering task, on a different Exchange server, for performance reasons.

You can use the Gathering Server tab to specify an Exchange server that is used in the default configuration when you create an organization-level task using the Create Task wizard.

## Prerequisites

For Exchange 2010 and Exchange 2013, the Exchange server must have the Client Access (CAS) role installed. You must also specify an Exchange mailbox for MAPI logon. The account that is used to run gathering tasks must have full access to the mailbox. In most cases, you would use the mailbox that is associated with the task credentials.

**i** | **NOTE:** Though MAPI is used for most Exchange 2013 gatherings, for a Mailbox Content and Attachment gathering, Exchange 2013 uses EWS (Exchange Web Services). For more information, see [Required permissions for Content and Attachment gatherings](#) on page 47.

For Exchange 2016 or Exchange 2019, the Exchange server must have the Mailbox role and the gathering account must be a member of the View-Only Organization Management group.

### **To change the default gathering server for tasks**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.

- 2 Right-click and select **Properties**.
- 3 Select the **Gathering Server** tab.
- 4 Select the **I want to use the following Exchange server**.
- 5 Select the versions of the Exchange mailbox servers in the organization and specify the connection server as follows:

**Table 5. Information required for different organization configurations.**

If the organization contains	Enter the following information
At least one public folder or mailbox server that is running Exchange 2010:	<ol style="list-style-type: none"> <li>1 Enter the Exchange NETBIOS name for an Exchange 2010 CAS server.</li> <li>2 Specify a mailbox in one of the following formats: <ul style="list-style-type: none"> <li>▪ Display Name</li> <li>▪ Alias</li> <li>▪ SMTP Address</li> </ul> </li> </ol>
At least one public folder or mailbox server that is running Exchange 2013:	<ol style="list-style-type: none"> <li>1 Enter the NETBIOS name for an Exchange 2013 CAS server.</li> <li>2 Specify a mailbox in one of the following formats: <ul style="list-style-type: none"> <li>▪ Display Name</li> <li>▪ Alias</li> <li>▪ SMTP Address</li> </ul> </li> </ol>
At least one public folder or mailbox server that is running Exchange 2016/2019:	Enter the Exchange NETBIOS name for an Exchange 2016/2019 Mailbox server.

The Exchange 2010 / 2013 mailbox is used for MAPI logon to collect mailbox information. The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.

If you have an Exchange mixed environment that includes Exchange 2010 servers that contain public folders, you must set an Exchange 2010 server for legacy public folder gatherings in the organization properties after you connect to the organization. For details, see [Selecting a Server for Legacy Public Folder Gathering](#) on page 80.

For Exchange 2016 or Exchange 2019, PowerShell is used instead of MAPI for the mailbox and public folder gatherings. For Exchange 2013 and later, Exchange Web Services (EWS) is used for the mailbox contents and attachments gatherings. (Public folder content and attachment gatherings are not available for Exchange 2016/2019.)

**i** | **TIP:** MessageStats has provided a PowerShell script that allows you to set a user account with full access rights to a specific mailbox. You can find the script in the MessageStats installation directory (by default this is C:\Program Files\Quest\MessageStats) in a folder called Scripts

- 3 Click **Validate**.  
MessageStats validates the specified Exchange server and, for Exchange 2010 and 2013, the specified mailbox.
- 4 Click **Apply**.

# Selecting a Server for Legacy Public Folder Gathering

If you are collecting public folder information from Exchange 2010 servers, you can select an Exchange 2010 server to be used to collect legacy public folder information using MAPI. You must also specify credentials that have access rights to an Exchange 2010 logon mailbox.

## **To select a specific server for legacy public folder gatherings**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Legacy Public Folder Gathering Server** tab.
- 4 Select the option titled **I want to use the following Exchange server**.
- 5 Select the Exchange 2010 client access server (CAS) to be used for legacy public folder gatherings for this organization.
- 6 Specify an Exchange 2010 mailbox in one of the following formats:
  - Display Name
  - Alias
  - SMTP Address

The mailbox is used for MAPI logon to collect public folder information. The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.

If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as `FirstName.LastName@domain.com`.

**i** | **NOTE:** The mailbox is not validated on this property tab. Ensure that it is a valid mailbox or the public folder tasks will fail

## Viewing Task Membership for an Organization

The Task Membership tab shows the gathering tasks in which the organization is included. You can review this list to determine whether you are collecting all the information that you require to produce meaningful reports for that organization.

The Task Membership tab provides basic information about the task, such as the credentials that are used to run the task, the regular schedule for the task, and the next scheduled run of the task (in both local and UTC time).

## Gathering Distribution Group Membership Information

Though the Default Gathering task includes distribution group gathering, you can determine whether to gather membership information for distribution groups. By default, the option to gather membership information is selected.

Gathering, processing, and storing distribution group membership can use significant server resources and storage. For large organizations, you may want to move the Distribution Group task to a different task execution server.





### **To change the distribution group membership option**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Distribution Group Membership** tab.
- 4 Select or clear the **Gather membership information when gathering distribution groups** check box.

## Selecting Servers for Tracking Log Archiving

Tracking log archiving is a feature that compresses and archives Exchange tracking log files. Using the Tracking Logs tab, you can select the Exchange servers for which you want to enable archiving.

### **To select a server for archiving**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Tracking Logs** tab.
- 4 Under the lower pane, click **Configure**.
- 5 Select the servers for which you want to enable archiving:
  - To select one server, click a server in the list and click .
  - To select all the servers, click .
- 6 Click **OK**.

## Where are the Tracking Logs Archived?

If you are archiving the tracking logs, the tracking logs are archived in the location that was specified using the Tracking Log Archive property tab. For information, see [Selecting a Tracking Log Archive Location](#) on page 67.

## What is the Workflow for Archiving?

In normal operation without archiving, the steps to handle the tracking logs for a server are performed in the following order:

- 1 Copy the tracking log to local cache.
- 2 Process the tracking log.
- 3 Clear the local cache.

If archiving is turned on, the steps to handle the tracking logs for a server are performed in the following order:

- 1 Copy the tracking log to the local cache.
- 2 Process the tracking log.
- 3 Compress the tracking log.
- 4 Move the tracking log to the archive location and clear the local cache.

If the tracking logs are already compressed, either through using the MessageStats Compression utility or through a third-party compression model, the step to compress the tracking log is not performed. MessageStats only compresses tracking logs if they are not compressed already.

The local cache that is used when processing the tracking logs is set in the properties tabs for a task. For more information, see [Configuring the Tracking Log Cache](#) on page 94.

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# Setting Exchange Server Properties

- [Setting Properties for an Exchange Server](#)
- [Assigning a Server Role for Reports](#)
- [Setting Server Thresholds for Reports](#)
- [Selecting a Server for Mailbox MAPI Gathering](#)
- [Selecting a Server for Legacy Public Folder MAPI gathering](#)
- [Viewing General Information for a Server](#)
- [Viewing the Task Membership for a Server](#)
- [Setting an Exchange Server to Archive Tracking Logs](#)

## Setting Properties for an Exchange Server

Use the Exchange Server Properties to set the defaults for your Exchange servers. You use the property tabs to specify the server-specific properties, such as the location of the tracking log share and delivery time thresholds.

### **To access Exchange server property tabs**

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Expand the Exchange organization and select a server.
- 3 Right-click and select **Properties**.
- 4 Select the tab for the properties tab that you want.

Using the Exchange Server properties tabs you can perform the following tasks:

- [Assigning a Server Role for Reports](#)
- [Setting Server Thresholds for Reports](#)
- [Selecting a Server for Mailbox MAPI Gathering](#)
- [Selecting a Server for Legacy Public Folder MAPI gathering](#)
- [Viewing General Information for a Server](#)
- [Viewing the Task Membership for a Server](#)
- [Setting an Exchange Server to Archive Tracking Logs](#)

## Assigning a Server Role for Reports

In Microsoft Exchange, server roles are used to identify the primary function of the server. The server role indicates the services that the server provides to the network. Different Exchange servers generate different traffic patterns due to their specified role.

In MessageStats, you can use the Server Roles tab to specify a role that can be used to group servers in reports. You can filter or group servers according to the server role. Thus, report content is not skewed by a single high-volume server when the remainder of the servers have a lower volume of traffic.

For a single server, the assigned server role appears in the list. If you have selected multiple servers, the server role list is displayed only if all the selected servers have exactly the same role.

## Discovered Roles and Assigned Roles

MessageStats retrieves the server role for the server from Active Directory and assigns the same server role in MessageStats. The server role is displayed in the Discovered Server Roles box. You cannot remove the server role value for a “discovered” server role.

You can add server roles to any Exchange server. You can remove these assigned server roles.

You can create additional server roles using the Custom Server Roles property tab under the Configuration node. For more information, see [Creating Server Roles for Exchange](#) on page 65.

### **To add a server role for a server**

- 1 Right-click a server in the treeview and select **Properties**.

You can select a server from the Servers node. Changes are reflected in all locations.

- 2 Select the **Server Roles** tab and click **Add**. You can select from the following pre-defined roles:

Front End	Back End
OWA	Bridgehead
Public Folder	Client Access
Mailbox	Unified Messaging
Edge Transport	Hub Transport

- 3 Select the server role from the list and click **OK**.

**i** | **NOTE:** If you have a report pack installed such as the report pack for Exchange ActiveSync, there will be additional pre-defined roles that you can select such as ActiveSync.

### **To remove a server role from a server**

- 1 Right-click a server in the treeview and select **Properties**.

You can select a server from the Servers node. Changes are reflected in all locations.

- 2 Select the **Server Roles** tab.
- 3 Select the server role from the list and click **Remove**.
- 4 Click **OK**.

## Updating Discovered Exchange Server Roles

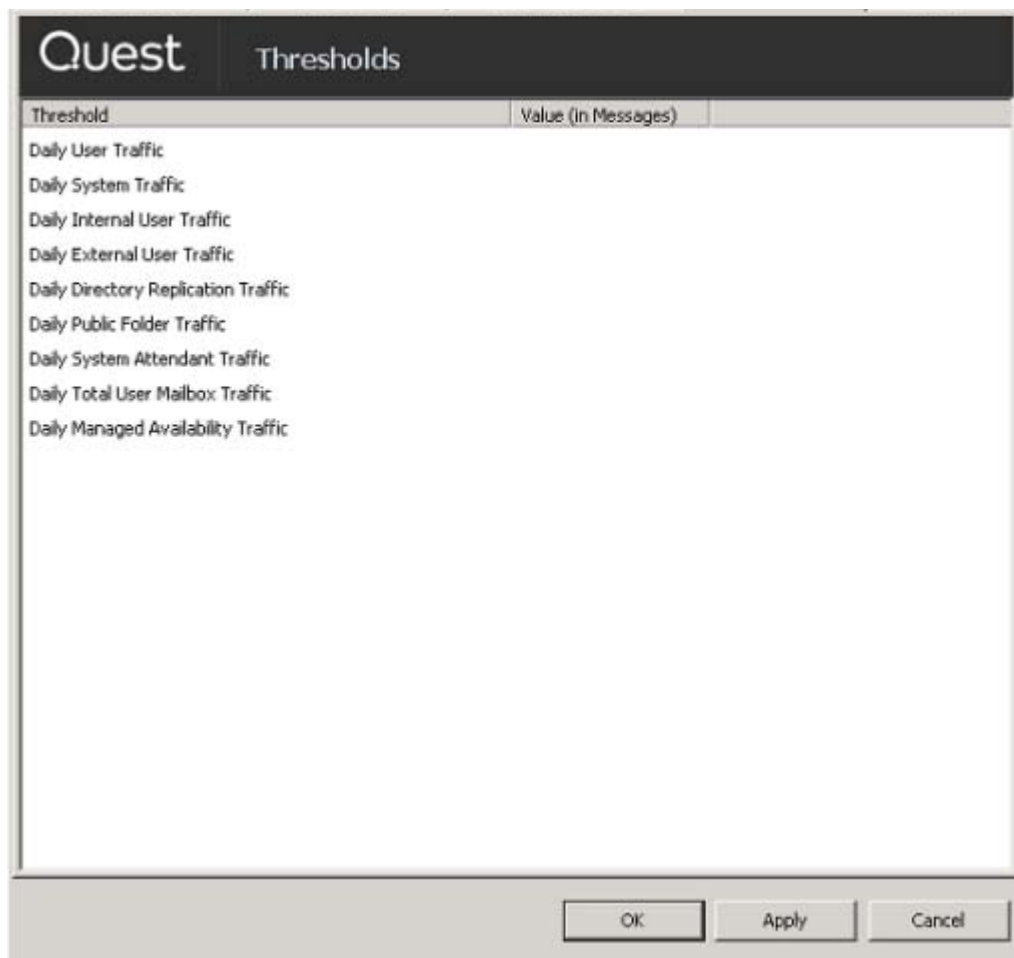
MessageStats can discover the server roles for a server in Active Directory and assign a matching server role in MessageStats.

When a role is removed from the Exchange server in Active Directory, MessageStats updates the server role property for the server the next time that it gathers the Exchange organization structure. MessageStats automatically gathers the Exchange structure once a day (at midnight, local time).

You can manually run an Exchange Organization Structure gathering task to enumerate the organization and update the Exchange server roles. For a specific organization, you can select the organization in the treeview, right-click and select the Regather Structure option.

# Setting Server Thresholds for Reports

Thresholds provide context to trends of data on graphs. You can apply thresholds to each server in your enterprise. Use the Thresholds tab to set appropriate thresholds.



## **To set a server traffic threshold**

- 1 Right-click on a server in the treeview.
- 2 Select the **Thresholds** tab.
- 3 Click the Value column of the threshold you want to set.

It is not mandatory to set all thresholds.

- 4 Enter an appropriate value and click **Apply**.

# Selecting a Server for Mailbox MAPI Gathering

The Mailbox MAPI property tab allows you to specify how the mailbox information is to be gathered for a specific Exchange 2010 or Exchange 2013 server.

Normally, the mailbox gathering tasks use the default gathering server that is defined for the organization. This information is displayed on the property tab. For more information about defining a gathering server for the organization, see [Selecting a Separate Gathering Server](#) on page 78.

In some situations, you may want to gather the Exchange 2010 or 2013 mailbox information using an server other than the specified Exchange gathering server that is defined for the organization.

Use this property page to specify a different Exchange server than the gathering server that was defined for the organization. This may be an Exchange server that is located geographically closer to this server.

## To select a specific Exchange server for mailbox MAPI gatherings

- 1 Right-click an Exchange 2010 or Exchange 2013 server in the treeview and select **Properties**.
- 2 Select the **Mailbox MAPI** tab.
- 3 Select the option titled **I want to use the following server for mailbox gathering tasks**.
- 4 Select the Exchange versions of the servers for which you are gathering from mailbox information and enter the MAPI logon credential information:

**Table 1. Information needed depending on the Exchange mailbox server.**

Option	When to use
For an Exchange 2010 mailbox server	<p>Select the Exchange Client Access Server (CAS) that should be used for mailbox gatherings for this server.</p> <p>Specify a mailbox in one of the following formats:</p> <ul style="list-style-type: none"><li>• Display Name</li><li>• Alias</li><li>• SMTP Address</li></ul> <p>The mailbox is used for MAPI logon to collect mailbox information. The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.</p> <p><b>NOTE:</b> The mailbox is not validated on this property tab. Ensure that it is a valid mailbox or the mailbox tasks will fail for this server.</p>
For an Exchange 2013 mailbox server	<ol style="list-style-type: none"><li>1 Enter the NETBIOS name for an Exchange 2013 CAS server that should be used for mailbox gatherings for this server.</li><li>2 Specify a mailbox in one of the following formats:<ul style="list-style-type: none"><li>▪ Display Name</li><li>▪ Alias</li><li>▪ SMTP Address</li></ul></li></ol> <p><b>NOTE:</b> The mailbox is not validated on this property page. Ensure that it is a valid mailbox or the mailbox tasks will fail for this server.</p>

# Selecting a Server for Legacy Public Folder MAPI gathering

The Legacy Public Folder MAPI property tab allows you to specify how public folder information is to be gathered for a specific Exchange 2010 server. This property page is used only to collect from Exchange 2010 public folders.

Normally, the public folder gathering tasks use the default gathering server that is defined for the organization. This information is displayed on the property tab. For more information about defining a gathering server for the organization, see [Selecting a Separate Gathering Server](#) on page 78.

In some situations, you may want to gather Exchange 2010 public folder information using an Exchange server other than the specified Exchange gathering server that is defined for the organization. This may be a server that is closer to this server.

## **To select a specific server for legacy public folder gatherings**

- 1 Right-click an Exchange 2010 server in the treeview and select **Properties**.
- 2 Select the **Legacy Public Folder MAPI** tab.
- 3 Select the option titled **I want to use the following server for public folder gathering tasks**.
- 4 Select the Exchange 2010 client access server (CAS) to be used for legacy public folder gatherings for this organization.
- 5 Specify an Exchange 2010 mailbox in one of the following formats:
  - Display Name
  - Alias
  - SMTP Address

The mailbox is used for MAPI logon to collect public folder information. The task credentials must have full access rights to this mailbox. Also, the mailbox must not be hidden from Exchange address lists.

If there is a child domain, you must enter the full email address instead of the display name or alias. For example, enter the mailbox as `FirstName.Lastname@domain.com`.

**i** | **NOTE:** The mailbox is not validated on this property tab. Ensure that it is a valid mailbox or the public folder tasks will fail

- 6 Click **Apply** and click **OK**.

## Viewing General Information for a Server

The General tab displays basic information about the selected server, including the following information:

- Exchange server name
- Exchange server full distinguished name (DN)
- Exchange version for the server
- date when a gathering task last gathered information from the server

You can use the General property tab to specify the LDAP port that is used for a server.

All other fields are populated with information that is collected by a gathering task and are read-only.

## Identifying the LDAP Port

The LDAP Port field indicates the default LDAP port used by the server. If you have an incorrect LDAP port specified in the Server Properties dialog box, MessageStats cannot connect to the server.

## LDAP Considerations

MessageStats communicates with Active Directory using a standard protocol called LDAP (Lightweight Directory Access Protocol). The standard communications port number for LDAP is 389.

If you have changed the port for security reasons, you might need to change LDAP port number. When you connect to your initial Exchange server, you can specify an alternate LDAP port by adding the port number to the end of the server name, separated by a colon.

For example, EXCHN:390 indicates that the server EXCHN is using port 390. If you do not specify a port, MessageStats uses port 389. If you have specified an incorrect LDAP port, MessageStats cannot connect to the server and a log entry is created to indicate that it could not connect to the server.

## Viewing the Task Membership for a Server

The Task Membership tab shows the Exchange server-level gathering tasks to which the server belongs. You can use this tab to determine if you are gathering enough information for this server.

The Task Membership tab provides basic information about the task, such as the credentials that are used to run the task, the regular schedule for the task, and the next scheduled run of the task (in both local and UTC time).

## Setting an Exchange Server to Archive Tracking Logs

Tracking log archiving is a feature that compresses and archives Exchange tracking log files. Using the Tracking Logs tab, you can enable the selected Exchange server for archiving. If you are archiving the tracking logs, the tracking logs are archived in the location that was specified using the Tracking Log Archive property tab. For information, see [Selecting a Tracking Log Archive Location](#) on page 67.

### *To set an Exchange server for archiving*

- 1 Expand the **Exchange Organizations** node in the treeview, select and expand an Exchange organization.
- 2 Select an Exchange server.
- 3 Right-click and select **Properties**.
- 4 Select the **Tracking Logs** tab.
- 5 Ensure that the shares shown as the locations for the source tracking log files are correct.

**Table 2. Specifying the tracking log location.**

Share	Location
Tracking log share	Specifies the location where MessageStats looks for new tracking logs. You can edit this field to specify a UNC path to a different location. This option may be relevant if you have configured your Exchange server to store the tracking log files to member/file servers or in a non-default directory. If you edit the default path to a remote share, you must precede the share name with “\”.
Alternate tracking log share	Specifies any alternate location where tracking log files reside. This share does not indicate where you want to place archived logs; instead, it indicates where tracking log files already exist.

- 6 Select the **Archive Tracking Logs** check box and click **Apply**.

For information about the steps that MessageStats performs for archiving, see [What is the Workflow for Archiving?](#) on page 81.

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# Setting Task Execution Server Properties

- [Configuring Task Execution Servers](#)
- [Viewing the Default Task Execution Server](#)
- [Specifying Paths for Task Log Files](#)
- [Setting Up Archiving for Task Logs](#)
- [Configuring Task Processors](#)
- [Modifying Task Processor DCOM Credentials](#)

## Configuring Task Execution Servers

Task execution servers are servers on which you have installed MessageStats task processors. In a complete installation, the task processors are installed on the same server as the MessageStats Scheduler Service and the MMC console.

In a distributed installation, the task processors might be installed on several additional computers. For each MessageStats instance, there is one MessageStats Scheduler Service that launches the task processors, regardless of where the task processors are located.

Using the properties tabs, you can select a different default task execution server, change the location to which task log files are written, configure archiving for task log files, or set the maximum number of task processors that can run on the task execution server.

The task execution servers are displayed under the Task Execution Servers node in the treeview.

### ***To access task execution server properties***

- 1 Select the task execution server and right-click.
- 2 Select **Properties**.

The following Task Execution Server properties tabs are available:

- **Summary.** See [Viewing the Default Task Execution Server](#) on page 89.
- **Task Logging Paths.** See [Specifying Paths for Task Log Files](#) on page 89.
- **Task Logging Archive.** See [Setting Up Archiving for Task Logs](#) on page 89.
- **Task Processors.** See [Configuring Task Processors](#) on page 90.
- **DCOM Credentials.** See [Modifying Task Processor DCOM Credentials](#) on page 90.



# Viewing the Default Task Execution Server

In a MessageStats implementation with several task execution servers, you can use the Summary tab to view whether this server is the default task execution server. This server is used as the default server when you create new tasks.

Table 1. Viewing the default Task Execution Server.

Option	Definition
Server Name	Shows the name of the selected Task Execution Server.
Is Default Task Execution Server	If the displayed server is the default task execution server for new tasks, this option is selected.

To set the default task execution server, you must right-click on a Task Execution Server in the treeview (or in the list) and select **Set As Default**.

## Specifying Paths for Task Log Files

Using the Task Logging Paths tab, you can specify the local location on the task execution server to which the task log files are written. You can also specify a share location for the files so that the files can be viewed from a remote MessageStats console.

Table 2. Specifying paths for storing the task logs.

Option	Definition
Store task logs in	Select the path location on the local task execution server in which the task logs are to be stored.
Task Log Share for Remote Consoles	Specify the share in which log files are stored for remote access. During installation, you are prompted to create a share on the task execution server for application log files. The share is required so that a remote MessageStats console can access the task logs.

## Setting Up Archiving for Task Logs

As part of task logging configuration, you have the option of enabling task log archives. You can set the length of time that you want to keep archived log files, and you can schedule a time at which log files are archived.

Use the Task Logging Archive tab to configure the archiving for task logs, if using.

Table 3. Configuring archiving for task logs.

Option	Definition
Enable archiving for MessageStats task logging	Select this option to specify the time that you want to retain the task log files, and the method for handling the files once the time limit is reached. The check box is cleared by default.
Number of months to keep	Specify the length of time, in months, that you want to keep the task log files.

Table 3. Configuring archiving for task logs.

Option	Definition
Time to execute archiving	Set the time at which you want the archiving process to be run on the task execution server.
Task Logging Management Method	Select one of the following options to handle the task logs once the time limit for keeping them has been reached: <ul style="list-style-type: none"><li>• Select <b>Delete Files</b> if you want the archived task log files to be deleted when the number of months you selected to retain the files has expired.</li><li>• Select <b>Move Files to Backup Location</b> to copy the files to the path location that you specify and delete them from the MessageStats server.</li><li>• Select <b>Compress Files to Backup Location</b> to compress the files and copy them to the path location that you specify. The compression option uses the PKZIP 2.0 file archive format.</li></ul>

## Configuring Task Processors

Using the Task Processors tab, you can define the maximum number of task processors that can be run concurrently by the task execution server at any time.

### *To set the maximum number of task processors*

- 1 Select the **Task Processor** tab.
- 2 Move the slider to the number of task processors that you want to allow to run concurrently on this Task Execution Server.
- 3 Click **Apply**.
- 4 Click **OK**.

## Modifying Task Processor DCOM Credentials

Task credentials refer to the account under which the task processors run to gather information from the Exchange servers.

By default, the task credentials set for the Task Execution Server are used by all tasks. However, you can also set separate credentials under which a specific task will run. If the task is using the default credentials for the Task Execution Server, you can correct the credentials using the DCOM Credentials property tab.

If the task uses explicit credentials, you can correct the credential information for the specific task. For information about how to change the credentials for a specific task, see [Changing Task Credentials](#) on page 92.

## Problems Caused by Incorrect Task Credentials

If the task credential information for a task is incorrect, when you run the task it will fail continually. This problem is easy to diagnose since the error details are provided in the task log. If you view the log and see the following error text, the credentials for the task are invalid and must be corrected:

```
The task activity item was unable to execute due to a problem with the task credentials. The user that was used to execute the task activity item is Domain\User.
```

Another issue that might occur is that a task never appears to be running. Even if you force the task to run using the Run Now command, the task never appears to start. This issue can also be caused by a DCOM problem.

## What Gets Updated

When you use the DCOM Credentials tab to modify the account, changes are made to the MessageStats Task Processor COM object. These credentials can also be accessed using the DCOM Config section of Windows Component Services and are used to instantiate the COM object.

**i** | **IMPORTANT:** To use this option, you must be viewing this property tab in a MessageStats client console that is installed on the Task Execution Server, which is the computer on which the MessageStats Task Processors are installed.

**Table 4. Changing the credentials used by the Task Execution Server.**

<b>Option</b>	<b>Definition</b>
Account	<p>Displays the existing account set as the MessageStats Task Execution Server account.</p> <ul style="list-style-type: none"><li>• Leave the account if only the password must be changed.</li><li>- OR -</li><li>• Enter a new account under which the MessageStats task processors are to be run.</li></ul> <p><b>NOTE:</b> The new account must already be a member of the MessageStats Admin local group and of the local Administrator group on the task execution server and on the MessageStats scheduler server. The account also must have administrative rights to access the Administrative share on the Exchange servers.</p>
Password	Enter the password for the service account.
Confirm Password	Re-enter the password to confirm it.

# Setting Task Default Properties

- [Introducing Task Default Properties](#)
- [Changing Task Credentials](#)
- [Changing the Schedule for a Task](#)
- [Enabling Task Logging](#)
- [Setting Task Retry Attempts](#)
- [Setting Financial Chargeback Amounts](#)
- [Setting Delivery Time Thresholds](#)
- [Configuring the Tracking Log Cache](#)
- [Using the Default Configuration](#)

## Introducing Task Default Properties

If you right-click the Tasks node in the treeview and select Properties, you can view properties that are used as the default values for all tasks. The following property tabs are available:

- Task Credentials (For more information, see [Changing Task Credentials](#) on page 92.)
- Task Schedule (For more information, see [Changing the Schedule for a Task](#) on page 93.)
- Task Logging (For more information, see [Enabling Task Logging](#) on page 93.)
- Task Retry (For more information see [Setting Task Retry Attempts](#) on page 93.)
- Financials (For more information, see [Setting Financial Chargeback Amounts](#) on page 93.)
- Delivery Time Threshold (For more information see [Setting Delivery Time Thresholds](#) on page 94.)
- Tracking Log Cache (For more information see [Configuring the Tracking Log Cache](#) on page 94.)

If you right-click on an individual task under the Tasks node, or in the Task Summary view, and select Properties, you can view the properties of the individual task.

## Changing Task Credentials

The Task Credentials property tab allows you to set the security credentials for the task. By default, this tab displays the credentials that you defined for the Task Scheduler Service during installation.

If you change the Task Execution Server, this tab automatically displays the credentials that you identified for that server.

Task credentials are not validated on this property tab so ensure that you enter a valid account and password or the gathering task will fail. For more information, see [Creating a Default Gathering Task](#) on page 33.

# Changing the Schedule for a Task

The Task Schedule property tab allows you to set a default schedule for your gathering tasks. You can create two types of schedules:

- Schedules that run once (at a specific time such as December 31 or Now)
- Schedules that run consecutively at a defined period (such as daily, weekly, or monthly)

MessageStats also allows you to run tasks immediately without changing the task schedule. From the Tasks Summary View, right-click a task and select Run Now.

## Enabling Task Logging

MessageStats creates log entries during several processes. You can use the Task Logging tab to set up logging at the task level. For information about setting logging at the scheduler service level, see [Configuring Service Logging](#) on page 61.

Table 1. Setting the logging options for tasks.

Option	Definition
Enable logging for the given Task Processor	Select this option to enable logging for this gathering task and you can identify the detail level of the task logs.
Log detail level	Set the level of detail that should be included in the log files. For information about the different levels of details, see <a href="#">About Logging Levels</a> on page 40.
Record errors in the Windows Application Event Log	Select this option and MessageStats also records errors in Windows Application Event logs.

## Setting Task Retry Attempts

The Task Retry property tab lets you specify the number of times you want MessageStats to try to connect to a server to run a task. It also lets you specify the number of minutes between each connection attempt.

If MessageStats cannot access a server to perform a task, it will continue to attempt to run the task based on the retry parameters you specified.

Table 2. Specifying the number of times a task will try to run.

Option	Parameter
Number of time to retry connection	Default value is three times.
Number of minutes between retry attempts	Default value is one minute.

## Setting Financial Chargeback Amounts

MessageStats facilitates the calculation of messaging traffic and storage chargeback costs. Chargeback amounts are the data and resource costs that are incurred by an organization. The amounts are distributed back to the departments or teams that incurred the expenses.

MessageStats does not have default chargeback amounts configured. If you want to use the financial chargeback feature, you must manually configure your chargeback amounts using the Financials tab. For more information, see [Defining Financial Chargeback](#) on page 44.

# Setting Delivery Time Thresholds

The Delivery Time Threshold property tab allows you to include hidden mailboxes in reports and to set a delivery time threshold for messages.

**Table 3. Including hidden mailboxes and setting delivery time thresholds.**

Option	Definition
Allow hidden mailboxes in Mailbox Reports	Select this check box to include hidden mailbox data in the Mailbox Sizes, Mailbox Quotas, Mailbox Size Distribution, and Inventory reports.  The information is gathered regardless of the setting. However, the information is included in the reports only if the check box is selected.
Threshold value for delivery time in Exchange organization (in seconds)	Set the number of seconds you want to use as the threshold parameter for message delivery times. If you do not set a number, MessageStats sets a default of five seconds.  The Average Delivery Time reports present the number and volume of messages that are under or over this threshold and the threshold is displayed on the appropriate threshold report graphs.

## Configuring the Tracking Log Cache

The Tracking Log Cache property tab shows the temporary file in which MessageStats stores the tracking logs while they are being processed. This is not the same location that is used for archiving tracking log files, whether you are using a custom archive solution or the MessageStats archiving feature.

**Table 4. Setting the temporary cache location for tracking log processing.**

Option	Definition
Save the Exchange tracking logs in	Specify the destination directory for the tracking log files that are copied from the originating Exchange servers.  The tracking logs are stored in this location temporarily while their contents are processed into the database. Once processing is complete, the files are deleted from this location.

If you have implemented archiving, you specify the archive location for tracking logs using the Tracking Log Archive property tab. For more information see [Selecting a Tracking Log Archive Location](#) on page 67 and [Selecting Servers for Tracking Log Archiving](#) on page 81.

## Using the Default Configuration

When you install MessageStats, certain parameters are used to establish a default configuration. MessageStats records the Service Account Setup information and populates the Task Credentials tab with the information. MessageStats also lists the MessageStats Task Execution Server options based on the installation information. MessageStats defines the default schedule as Now.

When you create a task, MessageStats automatically populates the Create Task Wizard with your Default Configuration settings. A check box on the bottom of the wizard pages indicates whether the page is currently set to use the default configuration:

Use Default Configuration

If the check box is selected, the configuration settings on the wizard page are read-only. You must clear the box before you attempt to make changes.

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# Compressing Tracking Log Files

- [About Compressing Exchange Tracking Logs](#)
- [Using the MessageStats Compression Tool](#)
- [Files Included in the Compression Tool](#)
- [Installing and Configuring the Compression Tool](#)
- [What Happens When You Run QMSDeployment.exe?](#)

## About Compressing Exchange Tracking Logs

MessageStats can support and take advantage of compressed tracking log files. If you already have a zip-compliant archiving solution for Exchange tracking logs, MessageStats recognizes the compressed file. If you do not have a zip-compliant archiving solution, MessageStats provides an optional compression tool.

You have three options when gathering Exchange tracking log files:

- Choose not to use compression and gather the raw tracking log files
- Use an existing zip-compliant archiving solution
- Use the MessageStats compression tool

By compressing the Exchange tracking log files, you can more efficiently process the large tracking logs that exist in enterprise-level organizations. Compression allows MessageStats to function without straining the network when gathering large tracking logs.

## Using the MessageStats Compression Tool

The MessageStats compression tool provides the following benefits:

- Reduces the size of tracking logs to reduce the impact of gathering these files across your network.
- Can perform “catch up” compression of tracking logs, so that you can compress all tracking logs in the source directory that do not already have a corresponding compressed file.
- Clear any orphaned files to ensure that all compressed files stay synchronized with the raw tracking logs.
- Can be configured to set the application priority.
- Can be configured to log information about the compression process. If you use the compression logging function, the log resides in the same directory as the compressed tracking logs.
- Can be scheduled to run so as not to interfere with other network activities.

# Files Included in the Compression Tool

The compression tool consists of two executable files and a language file, if applicable:

**Table 1. Files that comprise the compression tool.**

File name	Description
QMSDeployment.exe	Used to install and configure the QMSCompress executable. This executable file has a wizard-type interface.
QMSCompress.exe	Compresses the log files on Exchange servers. This executable file does not have a user interface. To change the compression settings, run the QMSDeployment executable file.
QMSDeployment.deu QMSDeployment.fra QMSDeployment.jpn QMSDeployment.kor	If you specified German, French, Japanese, or Korean as your operating language when you installed MessageStats, the corresponding language file is also included for the compression tool. The language file must also be copied to the server on which you deploy the two executable files.

The files are located in the MessageStats installation directory. For more information, see [Installing and Configuring the Compression Tool](#) on page 96.

You must copy these files to the Exchange servers on which you want to enable compression.

## Installing and Configuring the Compression Tool

Before you install and configure the compression tool, you must copy the compression tool files to all Exchange servers on which you will be compressing the tracking log files. You run the QMSDeployment.exe file locally. You cannot remotely deploy the compression tool.

When you install and configure the compression tool, a compression task is created in the Windows Task Scheduler.

### **To install and configure the compression tool**

- 1 Navigate to the MessageStats installation directory on your MessageStats server. By default, the path is as follows:
  - C:\Program Files\Quest\MessageStats (for 32-bit operating systems)
  - C:\Program Files (x86)\Quest\MessageStats (for 64-bit operating systems)
- 2 Copy the QMSCompress.exe and QMSDeployment.exe files to the Exchange server that contains the tracking logs you want to compress.
- 3 From the Exchange server, run the **QMSDeployment.exe** file.
- 4 Click **Next**.

The Exchange server name is displayed in the Server field.
- 5 Enter the location of the Exchange tracking log directory or browse to the appropriate directory.

Ensure that the tracking log folder is shared.
- 6 Enter the currently logged on account for the Security Context or click to enter a different account.

In most cases, it is recommended to use the MessageStats service account which should already have administrative rights on the Exchange server.
- 7 Click **Analyze Server**.



- 8 If all connections are successful, click **OK**.
- 9 Click the drop-down box and select **Deployed** to enable the compression tool.
- 10 Enter the start time for the compression task schedule.  
You should specify a start time that occurs before any gatherings are scheduled to run on the MessageStats server.
- 11 Specify the configuration options that you want.

**Table 2. Compression Tool options.**

Remove Orphans	Select this option to remove any compressed files that do not have an associated raw tracking log.
Catchup Enabled	Select this option to compress all the raw tracking logs instead of just the most recent logs.
Thread Priority	Set the desired thread priority.
Logging Level	Set to <b>Normal</b> .  Increased logging is generally used only when trouble shooting compression issues.

- 12 Click **Next** and review the summary of your compression options.
- 13 Click **Start** if the options are appropriate or click **Back** to change the configuration options.
- 14 Review the installation results and click **Finish**.

## What Happens When You Run QMSDeployment.exe?

When you install and configure compression using the Compression Deployment Wizard, the wizard performs the following actions.

**Table 3. What the compression tool does.**

Item	Description
Verifies the tracking log share name	Ensures that the tracking log share name that you selected exists on the server and can be accessed using the security account that you specified.
Creates a Compressed folder in the tracking log folder	Initially the folder contains the QMSCompress.exe file. After you compress an Exchange tracking log, the Compressed folder contains: <ul style="list-style-type: none"> <li>• Compressed tracking log files</li> <li>• Compression event log (compress.log)</li> </ul>
Schedules the compression task to Run Now	Compresses the most recent tracking log on the Exchange server as soon as the deployment is enabled and configuration is complete.
Creates a cyclical schedule in the task scheduler	Compresses the existing log file every day. This schedule default is 12:05 UTC but you configure the time in the Compression Deployment Wizard.

If the tracking log file is unavailable when the compression is scheduled, the tool compresses the tracking log file at the next scheduled compression, along with any new tracking logs that may exist.

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# Using the MessageStats Reports Console

- [Introducing MessageStats Reports](#)
- [Accessing the Reports](#)
- [Setting Security for Reports](#)
- [Performance Considerations for MessageStats Reports](#)

## Introducing MessageStats Reports

MessageStats has a separate web-based reporting component called MessageStats Reports. For descriptions of the individual reports, see the *MessageStats Reports User Guide*.

MessageStats Reports provide a collection of configured (stock) reports that allow report consumers to view data across multiple sections of an organization. You can change report parameters using Quick Filters. MessageStats Reports also provides a Web Report Wizard, which allows you to create customized reports based on any data available in your MessageStats database.

## Types of Reports

MessageStats Reports hosts two types of reports: stock reports and custom reports.

### Stock Reports

MessageStats Reports are delivered with the product and provide a comprehensive view of your organization, Exchange servers, mailboxes, and message traffic. By setting up subscriptions, you can generate reports for report users on a regular schedule. You can set up email notifications that either link to the reports or include attachments that contain actual report data.

For information about MessageStats Reports, see the *MessageStats Reports User Guide*.

### Custom Reports

In addition to viewing and editing the stock reports, you can create custom reports based on the existing data sources. Using the Web Report Wizard you can build your own reports. You can select fields, filters, format, grouping, and sorting options to create a report specific to your needs.

For information about the Web Report Wizard, see the *MessageStats Reports User Guide*.

# Accessing the Reports

You can access the MessageStats core reports and reports from the various report packs through the MessageStats console or by opening the web site on the reports IIS server.

## To access MessageStats Reports

- Select **Start | Programs | Quest | MessageStats | MessageStats Reports**.
- OR -
- Click the **MessageStats Reports** node in the treeview of the MessageStats Console.
- OR -
- Open the web site where MessageStats Reports resides using Internet Explorer.

If you cannot connect to the MessageStats Reports using the MessageStats Reports node in the console, verify the connection settings using the Reports property page. For more information, see [Specifying Reports IIS Settings](#) on page 63.

## MessageStats Reports Features

The following features are included in MessageStats Reports:

- The Web Report Wizard allows you to configure and generate reports, and provides report parts that you can add to and arrange on reports.
- The Graph Wizard allows you to create custom graphs from the data sources that you select.
- Predefined role-based security settings allow you to control who can view reports and create custom reports.
- A subscription service allows you to deliver reports through email, web sites, file shares, or ftp (file transfer protocol) site.
- Tooltips that display when you hover over column headings or over items in graphs can reveal detailed information.

Using the console, you can perform the following tasks:

- Group, insert, append, remove, and sort fields on reports. On-page Quick Filters allow you to change relevant report parameters quickly and easily to better focus your report.
- Display report data in bar graphs, line graphs, and pie charts.
- Export reports in Microsoft Excel, text (as either comma-separated values or tab-separated values), XML, Word file, HTML, or MHTML.

## Setting Security for Reports

MessageStats Reports includes a flexible solution for report security which allows you to assign certain permissions to users, and enable different views of the reporting tree depending on user needs and security requirements.

MessageStats Reports supports two types of security:

- Role-based security which is inherent in MessageStats Reports. For more information, For more information, see [Role-based Security](#) on page 100.
- File-based permissions security which requires NTFS manipulation of your network. For more information, For more information, see [File-System Based Security](#) on page 101.

# Role-based Security

Role-based security provides an initial layer of security for your reports. Three local security groups, each with specific permissions, are created when MessageStats Reports is installed:

- Web Report Administrators
- Web Report Authors
- Web Report Users

All three security groups have access to the report site and to all reports. The roles (Administrator, Author, User) provide different permissions that can restrict the ways reports can be manipulated.



The default membership to these security groups places administrators in the Web Report Administrator role, and all others in both the Web Report Authors and Web Report Users roles.

To customize the memberships, you can add or remove users from the default groups. Administrators can specify which users belong to which roles by modifying their membership in these local groups. The role-based security scheme is easier to manage than the file-system permissions security scheme, as the changes to these security groups immediately affect all reports.

**Table 1. Actions associated with each security role.**

Action	User	Author	Administrator
Accessing the site	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Exporting reports	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saving report settings in My Reports folder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saving report settings in any folder			<input checked="" type="checkbox"/>
Creating Custom Reports		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saving Custom Reports in My Reports folder		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Saving Custom Reports in any folder			<input checked="" type="checkbox"/>
Creating new folders in My Reports folder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Creating new folders in any folder			<input checked="" type="checkbox"/>
Copy folders or report within My Reports folder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy folders or reports to and within My Reports folder		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Copy folders or reports to and within any folder			<input checked="" type="checkbox"/>
Move folders or reports within My Reports folder	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Move folders or reports from any folder to My Reports folder			<input checked="" type="checkbox"/>

**Table 1. Actions associated with each security role.**

Action	User	Author	Administrator
Move folder to and within any folder			
Rename folders or reports in My Reports folder			
Rename folders or report in any folder			
Delete folders or reports in My Reports folder			
Delete folders or reports in any folder			
Edit folder descriptions in My Reports folder			
Edit folder descriptions in any folder			
Enable subscriptions for reports in My Reports folder			
Enable subscriptions for reports in any folder			
Set Filter Defaults			

## File-System Based Security

In addition to the Web Report security roles, you can enable an additional level of security using a file permissions-based scheme. At a minimum, the role-based security scheme allows all roles to view all reports.

Alternately, a permission-based scheme can restrict the reports to be available to some users. Explicit permissions are applied on a per-group or per-user basis, and assigned to individual files, folders, and reports. You can configure the settings so that different groups, such as executive management, the help desk, and Exchange administrators can see different report nodes and reports.

System administrators can create more sophisticated security schemes by modifying the file permissions for reports and folders in the file system on the web server. By default, report files and folders reside in the following location:

`c:\inetpub\wwwroot\MessageStatsReports\Reports`

By restricting the reports that are available to all users, you can protect sensitive data from users that do not require that information. Users connecting through a web browser can only see report files and folders for which they have read access permissions, and folders for which they have list permissions in the file system.

## Security Scenarios

Permission-based security provides more detailed control than role-based security, but it requires some action on an administrator's part. MessageStats does not provide the functionality to manipulate the permissions on files and folders. Use native Microsoft tools to create the appropriate Windows NT File System (NTFS) security changes.

Refer to Microsoft Windows native tools procedures for detailed information about implementing NTFS security scenarios. For information about determining an appropriate security scheme for your implementation, contact Quest Support.

**Table 2. Possible security implementation for reports.**

<b>Implementation</b>	<b>Details</b>
Restricting access to standard report folders	Using native Microsoft Windows tools, remove the Web Reports Administrators, Authors, and Users roles from the folder you want to restrict. Create new security groups and add the appropriate members to those groups. Add your newly-created security groups and their access rights to the report folder you want to restrict.
Restricting access to newly-created report folders	Using native Microsoft Windows tools, remove the Web Reports Administrators, Authors, and Users roles from the folder you want to restrict. Create new security groups and add the appropriate members to those groups. Add your newly-created security groups and their access rights to the report folder you want to restrict.
Restricting access to individual standard reports	Using native Microsoft Windows tools, remove the Web Reports Administrators, Authors, and Users roles from the report you want to restrict. Create new security groups and add the appropriate members to those groups. Add your newly-created security groups and their access rights to the report you want to restrict.
Restricting access to individual Custom Reports	Using native Microsoft Windows tools, remove the Web Reports Administrators, Authors, and Users roles from the report you want to restrict. Create new security groups and add the appropriate members to those groups. Add your newly-created security groups and their access rights to the report you want to restrict.

## Performance Considerations for MessageStats Reports

MessageStats Reports are optimized for performance for a number of standard usage scenarios and date periods. Due to the volume of data in the MessageStats Database and complexity of reports, report performance can be slower in some scenarios.

### Improving Report Rendering Performance

To address slow running reports, you can:

- Reduce the number of parts in an *At A Glance* report or in a custom report.
- Increase report rendering efficiency by specifying shorter date ranges or time periods.

### Performing Regular Database Maintenance

You can ensure that reports run quickly by performing routine maintenance on the MessageStats database including reindexing and defragmenting the database. For information about reindexing and defragmenting data, see [Using Database Management](#) on page 105.

# Creating Subscriptions Using Alternate Delivery Methods

When report consumers require long running and complex reports, you might consider creating report subscriptions that use a delivery method other than Send as Link, thereby allowing MessageStats Reports to process the report offline for delivery to a web site or within an email body. For information about report subscriptions, see the *MessageStats Reports User Guide*.

## Best Practices for Report Performance

To ensure optimal performance, it is recommended that you consider the following options:

- Install MessageStats Reports on a separate computer to avoid impacts to memory and CPU usage due to report rendering.
- Set initial filter options to reduce the data set queries. Select specific filter options or a specific date range to ensure that a smaller result set is searched, resulting in quicker results.
- For audits, ensure that you carefully define the mailboxes, Internet domains, message subjects, and message delivery times. Extensive audit information in the MessageStats Database can slow performance since the report queries must scan a larger dataset to produce audit reports. For information about auditing, see [About Audits](#) on page 56.
- Run statistical reports at the same frequency as the gathering recurrence for the report content. For example, if you configure MessageStats to collect distribution group information on the first day of each month but you create a report subscription for distribution groups to be sent every Friday, only the first Friday of the month contains new information. Each subsequent Friday of the month the report does not contain any new information.
- Create subscriptions only for reports that are useful to oversee the operation of your Exchange organizations. For example, set subscriptions for summary reports to identify anomalies and trends. Based on the summary reports, you can create additional reports to investigate any unexpected results.
- Select the report that best suits your needs. Several reports may include the same data organized in different ways (such as Top Senders by Messages and Top Senders by Volume). Determine if one report satisfies the reporting need instead of duplicating the effort.

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# Database Management

- [About the MessageStats Database](#)
- [Managing your MessageStats Database](#)
- [Using Database Management](#)
- [Deleting Historical Data](#)
- [Database Maintenance— Reindexing and Defragmenting the Database](#)
- [Deleting Object or Report Data](#)
- [Clearing the Database](#)

## About the MessageStats Database

The MessageStats Database stores the data that is used by MessageStats Reports to render reports.

When you install MessageStats, you provide the location of the database server. MessageStats stores that location and displays the location on the Database tab of the MessageStats Server Properties dialog box. For more information, For more information, see [Configuring the MessageStats Server](#) on page 60.

It is recommended that you adhere to Microsoft best practices and create regular backups of your database.

## Supported Database Implementations

The supported database server implementations that you can use to store tracking log and Exchange object data are as follows:

- SQL Server 2012
- SQL Server 2014
- SQL Server 2016
- SQL Server 2017

SQL Server Express is supported for evaluation scenarios only. SQL Server Agent must be installed and running to use the Database Management tasks such as database reindexing, defragmenting, or database aging. Since SQL Express does not include the SQL Server Agent, the Database Management tasks are not available when running on SQL Express.

## Managing your MessageStats Database

The MessageStats Database stores the information that is used by MessageStats Reports. When the database is properly tuned, information can be efficiently stored, and MessageStats Reports can quickly access the required data.

Over time, the MessageStats Database will grow, and the database server can become taxed. However, it is critical that the database retain enough data for any historical reporting needs that may arise.



To manage your MessageStats Database, you can use the Database Management functionality to selectively delete obsolete data and to tune the database for optimal performance.

## Managing Audited Information

Audits affect both the overall size of your database and gathering performance time. It is recommended that you carefully select the audits that you want to perform, and retain audit information for as little time as possible to avoid increasing the size of your database too rapidly.

## Using Database Management

MessageStats allows you to optimize the storage of tracking log and Exchange object data to prevent excessively rapid growth of your database. Using Database Management, you can delete obsolete information and tune your database.

**IMPORTANT:** Before you modify your database, ensure that no MessageStats consoles are currently writing information to the database. If you use Database Management while a MessageStats console is writing to the database, you risk corrupting your database.

## Prerequisites

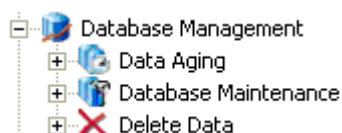
For Database Management functions to be available, the SQL Server agent must be installed and running on the SQL Server. (SQL Server agent is not included in SQL Server Express.)

To use the Database Management features in a distributed environment, one of the following accounts must have the **sysadmin** fixed server role on the SQL server that hosts the MessageStats database:

- the MessageStats service account
- the account that is currently logged into the MessageStats console

### To access the Database Management functionality

- Select **Database Management** from the treeview.



The Database Management tool provides the following functionality:

- Database Aging (For more information, see [Deleting Historical Data](#) on page 106.)
- Database Maintenance (For more information, see [Database Maintenance— Reindexing and Defragmenting the Database](#) on page 107.)
- Deleting Data (For more information, see [Deleting Object or Report Data](#) on page 109.)

## Database Management Statistics

When you select the Database Management node, the Database Management database information page is displayed.

This page provides statistics about your MessageStats Database that you can review before you perform any database management actions.

Table 1. Viewing information about the MessageStats database.

Title	Information Reported
SQL Server Edition	The version information about the SQL Server software on which the database resides.
Database Created on	The date and time when the database was created
Last Database Backup on	When the database was last backed up.
Database Size	The database size including the amount of free space and the amount of used space.
MessageStats Database Build	The version number of the MessageStats database that is installed.
MessageStats Application Build	The version number of the MessageStats application software that is installed.

## Deleting Historical Data

You can use the Data Aging function to delete the historical data from your database. By deleting historical data, you can increase MessageStats performance in the following ways:

- Decrease the size of your database while retaining data that may be required in the future.
- Decrease the amount of time it takes the task processors to write information to the MessageStats Database.
- Decrease the amount of time it takes MessageStats Reports to read information from the database to render reports.

## Configuring a Data Aging Task

You can use the Data Aging node to define a recurring task to remove data that is older than a specified time period.

You can set different schedules for deleting statistics and for deleting audit information in your database. For example, you might want to remove audit information more frequently, as audits rapidly increase the size of your database.

### *To define a data aging task*

- 1 Expand the **Database Management | Data Aging** nodes in the treeview.
- 2 Select **Delete aged data**.
- 3 Specify the type of data to be aged: **Age Statistics (days)** and/or **Age Audits (days)**.
- 4 Enter the number of days to retain statistical and audit data in your database.  
  
You might want to remove audit information more often than statistics. Audits can rapidly increase the size of your database.
- 5 Click **Configure Job**.
- 6 Select **Daily**, **Weekly**, or **Monthly** to indicate how often you want to delete the data older than your retention definitions.  
  
Depending on the schedule type that you select, the bottom box changes to an appropriate interval selector.
- 7 Enter the **Start Date** and **Start Time** information.
- 8 Click to select the **Limit Job Execution Time** box if you want to limit the time duration for an aging job, and enter an end time.
- 9 Enter an appropriate recurrence interval:

- Enter the number of days between jobs for Daily schedules.
- Enter the day of the week for Weekly schedules.
- Enter the day of the month for Monthly schedules.

10 Click **Deploy**.

## About the Age Audits Option

The Age Audits (days) option will age data for the following reports:

- Organizations | Subject Auditing | Subject Sent Audits
- Organizations | Subject Auditing | Subject Received Audits
- Servers | Delivery Times | Message Delivery Audit
- Mailboxes | Mailbox Auditing | Mailbox Sent Audits
- Mailboxes | Mailbox Auditing | Mailbox Received Audits
- Internet | Internet Domain Auditing | Domain Inbound Audits
- Internet | Internet Domain Auditing | Domain Outbound Audits

## Data Aging Job History

After you create a job, the interface changes to a three-tab format:

- The Schedule tab contains the same content as the Create Job tab had before a job was created.
- The Properties tab describes the properties associated with the aging job, and is updated as new information becomes available.
- The History tab contains a log of past aging jobs.

## Logging the Aging Progress

Because the aging process is performed by a service, progress is recorded in the log journal for all database management activities.

The log information is available in the MessageStats log journal, so activity can be viewed on the MessageStats Gathering reports by filtering the Source field by Stats Data Aging or Audit Data Aging values.

# Database Maintenance— Reindexing and Defragmenting the Database

The Database Maintenance node of the navigation tree contains the functionality to reindex the individual database tables and to defragment the database.

**i** | **IMPORTANT:** Before you reindex or defragment the database, ensure that no MessageStats consoles are currently writing information to the database. If you use Database Management while a MessageStats console is writing to the database, you risk corrupting your database.

The Reindex option completely reindexes each table in the database. The Defragment option simply defragments the indexes.

If you run the Reindex option, you do not need to run the Defragment option since there is nothing to defragment if all the indexes are new.

Using these functions can increase performance in the following ways:

- Decrease the amount of time it takes the MessageStats task processors to write information into the database.

- Decrease the amount of time it takes MessageStats Reports to read information from the database to render your reports.

**Table 2. Options for scheduling database maintenance tasks.**

<b>Recommended alternatives for database maintenance</b>	
Resource Intensive	<ul style="list-style-type: none"> <li>• Schedule the Reindex job to run every day after all the gathering tasks have completed.</li> </ul>
Less Resource Intensive	<ol style="list-style-type: none"> <li>1 Schedule the Defragment job to run every weekday (Monday through Friday) after all the gathering tasks have completed.</li> <li>2 Schedule the Reindex job to run on the weekend (or once a month) after all the gathering tasks have completed.</li> </ol>

## Reindexing the Database Tables

MessageStats provides functionality to reindex database tables. The Create Job tab of the Reindex dialog box appears until you define your first reindexing job.

### *To create a reindexing job*

- 1 Expand the **Database Management | Database Maintenance** nodes in the treeview.
- 2 Select the **Reindex** node.
- 3 Select **Daily**, **Weekly**, or **Monthly** from the Schedule type box.  
Depending on the schedule type that you select, the bottom box of the dialog box changes to an appropriate interval selector.
- 4 Enter a Start Date and Start Time in the respective boxes.
- 5 Select the **Limit Job Execution Time** box if you want to limit the duration of a reindexing job, and enter an appropriate end time.
- 6 Enter an appropriate recurrence interval:
  - Enter the number of days between jobs for Daily schedules.
  - Enter the day of the week for Weekly schedules.
  - Enter the day of the month for Monthly schedules.
- 7 Click **Deploy**.

## Reindexing Job History

After you create a job, the Reindex interface changes to a three-tab format:

- The Schedule tab contains the same content as the Create Job tab displayed before a job was created.
- The Properties tab describes the properties associated with the reindexing job, and is updated as new information becomes available. If you want to start an immediate Reindex job, you can click the Start button on this tab.
- The History tab contains a log of past reindexing jobs.

## Defragmenting the Database

Use the Defragment option to defragment your database. The Create Job tab of the Defragment dialog box appears until you define the first defragmenting job.

### To create a defragmentation job

- 1 Expand the **Database Management | Database Maintenance** nodes in the treeview.
- 2 Select the **Defragment** node.
- 3 Select **Daily**, **Weekly**, or **Monthly** from the Schedule type box.  
Depending on the schedule type that you select, the bottom box of the dialog box changes to an appropriate interval selector.
- 4 Enter the Start Date and Start Time information in the respective boxes.
- 5 Select the **Limit Job Execution Time** box if you want to limit the duration of time for a defragmenting job, and enter an end time.
- 6 Enter a recurrence interval:
  - Enter the number of days between jobs for Daily schedules.
  - Enter the day of the week for Weekly schedules.
  - Enter the day of the month for Monthly schedules.
- 7 Click **Deploy**.

## Defragmentation Job History

After you create a job, the Defragment interface changes to a three-tab format:

- The Schedule tab contains the same content the Create Job tab had before a job was created.
- The Properties tab describes the properties associated with the defragmentation job, and is updated as new information becomes available. To start an immediate Defragment job, click the Start button on this tab.
- The History tab contains a log of past defragmenting jobs.

## Deleting Object or Report Data

The Delete Data node provides the functions that delete Exchange object data and statistical report data from your database:

- [Deleting Report Data](#)  
Report Data allows you to delete a date range of statistical data relating to Exchange objects including organizations, servers or DAGs, distribution groups, mailboxes, or public folders.
- [Deleting Object Data](#)  
Object Data allows you to delete entire Exchange objects including organizations, servers or DAGs, distribution groups, mailboxes, or public folders.
- [Clearing the Database](#)  
Clear Database removes all information from your database.

**i** | **IMPORTANT:** Before you delete data from the database, ensure that no MessageStats consoles are currently writing information to the database. If you use Database Management while a MessageStats console is writing to the database, you risk corrupting your database.

The Report Data and Object Data functions also provide the option of showing only objects that were deleted from the Exchange server but that still exist in the MessageStats Database.

If you accidentally delete report data and the tracking log files still exist in your archive files, you can replace the deleted data. Reimporting the archived tracking logs only recovers usage metrics and does not recover Exchange object data.

## Deleting Report Data

Use the Report Data function to delete a date range of statistical data relating to Exchange objects including

- Organizations
- Public folders or distribution groups
- Servers or DAGs
- Mailboxes and public folders.

The information you want to delete becomes more granular as you progress from the top to the bottom. When you check one of the check boxes on the Report Data dialog, a list appears for you to select the appropriate Exchange objects.

If you select a DAG, all the servers that are in the DAG are also selected.

For example, suppose you select an organization using the first check box and a server using the second check box. MessageStats deletes all statistical information for all mailboxes on that server.

Alternately, if you only want to delete information for a single mailbox, you must set the information for all of the previous check boxes to focus to the single mailbox.

If you select an object that does not have child objects, the remaining check boxes disappear. For example, If you select a distribution group using the second check box, there are no child objects, so the Server and Mailbox check boxes do not display.

### ***To delete report data from the database***

- 1 Expand the **Database Management | Delete Data** nodes in the treeview.
- 2 Click the **Report Data** node.
- 3 Select the organizations, administration groups, servers or DAGs, or mailboxes for the statistical data that you want to delete.
- 4 Click **Get Range** to select the date range for the data you want to delete.  
The Show Deleted Objects Only check box is not available for an organization.
- 5 Indicate the date range for the information you want to delete.
- 6 Click **Delete Data**.
- 7 Verify that you want to delete the data.

## Deleting Object Data

When you delete Object data, objects such as an Exchange server or an organization and all the historical statistical data for the object are deleted. There is no date range. For example, suppose an Exchange server has failed. In this case, you might not want to retain its records in the MessageStats database.

If you want to delete data only for specific time period, use the delete Report Data option.

Use the Object Data function to delete Exchange objects and all related historical data for:

- Organizations
- Public folders or distribution groups
- Servers or DAGs
- Mailboxes and public folders.

The information you want to delete becomes more granular as you progress from the top to the bottom. When you select one of the check boxes on the Object Data dialog box, a list appears for you to select the appropriate objects.

For example, suppose that you select an organization. If you do not select a specific server, MessageStats removes information for *all* servers and mailboxes in that organization. Alternately, if you only want to delete information for a single mailbox, you must select all of the previous check boxes to focus to the single mailbox.

If you select a DAG, all the servers that are in the DAG are also selected. If you select an object that does not have child objects, the remaining check boxes disappear.

### **To delete object data from the database**

- 1 Expand the **Database Management | Deleting Data** nodes in the treeview.
- 2 Select the **Object Data** node.
- 3 Select the organizations, administration groups, servers or DAGs, or mailboxes and the associated objects to indicate the information that you want to delete.
- 4 Click the **Show Deleted Objects Only** check box to see the objects that are deleted in Exchange but still exist in the MessageStats database.  
An estimated date range for the selected object data is displayed by default.
- 5 Click **Get Range** to view the date range for the actual data.
- 6 Click **Delete Object**.
- 7 Verify that you want to delete the object information.

## Clearing the Database

The Clear Database function allows you to delete all the information in your database.

**i | IMPORTANT:** The Clear Database function cannot be reversed. If you may need any of the information you intend to delete, create a backup of the database.

You can delete the following information:

- Processed tracking log information
- Processed Exchange object data
- Statistical information about your use of MessageStats (such as gathering status and last gathering)
- Region definitions
- Server properties information
- Default filter options

The Clear Database function also provides the option of deleting the gathering schedules that you have established.

## Prerequisites

Before you delete data, ensure that no MessageStats consoles attached to the database are currently writing information to the database. If you use the Database Management utility while a MessageStats console is writing to the database, you risk corrupting your database.

### **To delete all data from the database**

- 1 Expand the **Database Management | Deleting Data** nodes in the treeview.
- 2 Select the **Clear Database** node.
- 3 Select the **Include Schedules** check box if you want to delete your defined gathering schedules.
- 4 Click **Clear Database**.
- 5 Verify that you want to delete the data.

# Appendix A: Microsoft ASP.NET Configuration Issues

MessageStats Reports require that Microsoft .Net Framework 3.5 be installed on the server on which the web-based reports are hosted. If you have problems accessing MessageStats Reports, you can check the following settings that affect ASP Active Server Page (ASP) configuration.

To install MessageStats Reports on Windows Server, you must install and enable IIS (Internet Information Services). The Web Server (IIS) role must be installed on Windows Server and the following IIS role services must be enabled:

**Table 1. Roles Services Required**

IIS 7.0 - Web server (IIS) Role services	Services that must be enabled
Common HTTP Features	<ul style="list-style-type: none"> <li>• Static Content</li> <li>• Default Document</li> </ul>
Application Development	<ul style="list-style-type: none"> <li>• ASP.NET</li> <li>• ASP</li> <li>• Server Side Includes</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Windows Authentication</li> </ul>

You can install the Web Services (IIS) role using Server Manager and click Manage | Add Roles and Features or through PowerShell cmdlets.

## Repairing IIS Mappings for ASP.NET

In some Microsoft environments, you can encounter a configuration issue with Microsoft .NET which results in MessageStats being unable to report information. The error indicates that Microsoft .NET Framework version 2.0 must be installed on the IIS server that hosts MessageStats Reports, and that Microsoft ASP.NET must be enabled on the virtual directory that contains MessageStats Reports.

If you are sure that the Microsoft .NET Framework is installed and that ASP.NET is enabled, you may need to repair the IIS mappings for ASP.NET. The following procedure is based on the Microsoft Knowledge Base article 306005. Use the following procedure to configure Microsoft ASP.NET.

### ***To repair configuration mappings for ASP.NET***

- 1 Run the `Aspnet_regiis.exe` utility:
  - a Click **Start** and select **Run**.
  - b Type `cmd` and click **OK**.
  - c Navigate to the .NET Framework directory. (`%windir%\Microsoft.NET\Framework\version\`)



In this path, the version (v) represents the .NET Framework directory version that is installed on the server. Replace the version placeholder in the example with the actual version number.

d Type the following command:

**aspnet\_regiis.exe -i**

e Press ENTER.

2 Restart the IIS Service:

f Click **Start** and select **Run**.

g Type **iisreset** and press ENTER.

## If Repairing the IIS Mappings for ASP.NET Fails

If you follow the procedure to repair the IIS mappings and you still see the error, the cause might be that the Network Service is not granted the correct permission to write to the IIS metabase.

### *To grant permissions to the Network Service to write to the IIS metabase*

1 Click **Start** and select **Run**.

2 In the Open text box, type **cmd** and click **OK**.

3 Navigate to the .NET Framework directory. (%windir%\Microsoft.NET\Framework\version\)

In this path, the version represents the .NET Framework directory version that is installed on the server. Replace the placeholder in the example with an actual version number.

4 Type the following command:

**aspnet\_regiis.exe -ga "nt authority\network service"**

The "-ga" option grants the specified user or group access to the IIS metabase and other directories that are used by ASP.NET.

## Appendix B: Gathering Task Dependencies

Certain gathering tasks must be completed before other tasks can start. This appendix provides information about any dependencies or prerequisites for a gathering task, such as another task that must be completed or configuration that you must do in the MessageStats console.

Generally you run composite gathering tasks that contain the individual gathering tasks that run in a specific order, depending on information gathered by each gathering task. In this case, the individual gatherings are run in order of their dependencies.

For servers that host Exchange, there are composite gatherings that are specific to the Exchange role hosted by the server.

You might also run individual gathering tasks if specific information is required that is not part of a regularly-run composite gathering. In this case, you can use this appendix to determine the dependencies for an individual gathering.

MessageStats automatically runs the Exchange Organization Structure gathering every night at midnight (local time). If you have made changes to your Exchange organization, you can select the organization in the console treeview, right-click and select the Regather Structure option. This option allows you to force a regathering to enumerate the Exchange servers that comprise the organization.

The following table lists the dependencies for the MessageStats Exchange gathering tasks. The table is organized as follows:

[Composite Gathering Tasks](#)

[Role-Based Gatherings for Servers Running Exchange](#)

[Individual Gathering Tasks](#)

### MessageStats Gathering Tasks for Exchange

Table 1. MessageStats Exchange Gathering Task Dependencies.

Gathering Task Name	Part of Default?	Description	Dependent on
<i>Composite Gathering Tasks</i>			

Table 1. MessageStats Exchange Gathering Task Dependencies.

Gathering Task Name	Part of Default?	Description	Dependent on
Default	N/A	<p>A composite task that includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Internal Namespaces</li> <li>• Connectors</li> <li>• Mail Contacts</li> <li>• Mailbox Account Properties</li> <li>• Distribution Groups</li> <li>• Databases</li> <li>• Mailboxes</li> <li>• Mail-Enabled Objects</li> <li>• Server Properties</li> <li>• Tracking Logs</li> <li>• Virtual Servers</li> <li>• Server Uptime Performance Counter</li> <li>• Reporting Aggregation</li> </ul>	<p>The dependencies for the individual tasks that comprise the Default Gathering task are described later in this table.</p> <p><b>NOTE:</b> If you want public folder reports or content and analysis reports, you must create separate gatherings.</p> <p>For public folder reports, create an Exchange Public Folders gathering.</p> <p>For content and analysis reports, create an Exchange Mailbox Content and Attachments gathering or an Exchange Public Folder Content and Attachments gathering.</p>
Complete Exchange Organization-Level	No	<p>A composite task that initiates Exchange organization-level gatherings and includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Internal Namespaces</li> <li>• Connectors</li> <li>• Mail Contacts</li> <li>• Distribution Groups</li> <li>• Mail-Enabled Objects</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for distributed deployments in which the Exchange organization-level tasks must be executed on a single Task Execution Server.</p>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>
Minimum Exchange Organization-Level	No	<p>A composite task that initiates the minimum Exchange organization-level gatherings needed to find the main Exchange objects. Dependent server-level tasks need the Exchange objects to associate to their gathered information. This task includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Internal Namespaces</li> <li>• Connectors</li> <li>• Mail-Enabled Objects</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for large Exchange organizations from which the main Exchange organization-level information must first be gathered so that Exchange server-level gatherings can run earlier.</p>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

Gathering Task Name	Part of Default?	Description	Dependent on
Complete Exchange Server-Level	No	<p>A composite task that initiates the main Exchange server-level gatherings. This task includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Databases</li> <li>• Mailboxes</li> <li>• Virtual Servers</li> <li>• Tracking Logs</li> <li>• Exchange Public Folder Instance Enumeration</li> <li>• Server Properties</li> <li>• Mailbox Account Properties</li> <li>• Server Uptime Performance Counter</li> <li>• Reporting Aggregation</li> </ul> <p>Does not include the following Exchange server-level tasks:</p> <ul style="list-style-type: none"> <li>• Mailbox Security</li> <li>• Public Folder Security</li> <li>• Mailbox Content and Attachment</li> <li>• Public Folder Content and Attachment</li> </ul> <p>Useful for distributed deployments in which the Exchange server-level tasks must be executed against a collection of Exchange servers from a single Task Execution Server.</p>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>
Minimum Exchange Server-Level	No	<p>A composite task that initiates a subset of Exchange server-level gatherings. This task includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Databases</li> <li>• Mailboxes</li> <li>• Tracking Logs</li> <li>• Mailbox Account Properties</li> <li>• Reporting Aggregation</li> </ul> <p>Useful in deployments where the main focus is main mail-enabled object and Exchange Server usage for an Exchange organization.</p>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

Gathering Task Name	Part of Default?	Description	Dependent on
Complete Exchange	No	<p>A composite task that initiates all the main Exchange-level gatherings. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Complete Exchange Organization-Level</li> <li>• Complete Exchange Server-Level</li> </ul> <p>In addition, this gathering will include the organization-level public folder gathering tasks (the Exchange Public Folder Tree Structure Enumeration and the Exchange Public Folder Tree Structure Analysis).</p> <p>Useful for smaller MessageStats deployments in which all of the main gatherings must be done in a single gathering.</p>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>
<b>Role-Based Gatherings for Servers Running Exchange</b>			
Complete Exchange Server-Level Gathering for Mailbox Server	No	<p>A composite task that initiates core Exchange server-level gatherings for Exchange servers that have the Mailbox role installed. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Databases</li> <li>• Mailboxes</li> <li>• Virtual Servers</li> <li>• Exchange Public Folder Instance Enumeration</li> <li>• Server Properties</li> <li>• Mailbox Account Properties</li> <li>• Server Uptime Performance Counter</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for distributed MessageStats deployments in which the Exchange server-level tasks are executed against a collection of Exchange servers from a single Task Execution Server.</p> <p><b>NOTE:</b> Does not include the following Exchange server-level tasks:</p> <ul style="list-style-type: none"> <li>• Mailbox Security</li> <li>• Public Folder Security</li> <li>• Mailbox Content and Attachment</li> <li>• Public Folder Content and Attachment</li> </ul>	<p>The dependencies for the individual tasks that comprise this task are described subsequently in this table.</p>

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

<b>Gathering Task Name</b>	<b>Part of Default?</b>	<b>Description</b>	<b>Dependent on</b>
Complete Exchange Server-Level Gathering for Transport Server	No	<p>A composite task that initiates core Exchange server-level gatherings for Exchange 2010 hub transport servers and for Exchange 2013/2016/2019 mailbox servers. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Tracking Logs</li> <li>• Virtual Servers</li> <li>• Server Properties</li> <li>• Server Uptime Performance Counter</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for distributed MessageStats deployments in which the Exchange server-level tasks are executed against a collection of Exchange servers from a single Task Execution Server.</p>	The dependencies for the individual tasks that comprise this task are described subsequently in this table.
Complete Exchange Server-Level Gathering for Edge Server	No	<p>A composite task that initiates core Exchange server-level gatherings for Exchange Edge servers. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Tracking Logs</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for distributed MessageStats deployments in which the Exchange server-level tasks are executed against a collection of Exchange servers from a single Task Execution Server.</p>	The dependencies for the individual tasks that comprise this task are described subsequently in this table.
Complete Exchange Server-Level Gathering for Unified Messaging Server	No	<p>A composite task that initiates core Exchange server-level gatherings for Exchange 2010 Unified Messaging Server and for Exchange 2013/2016/2019 Mailbox servers. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>• Virtual Servers</li> <li>• Server Properties</li> <li>• Server Uptime Performance Counter</li> <li>• Reporting Aggregation</li> </ul> <p>Useful for distributed MessageStats deployments in which the Exchange server-level tasks are executed against a collection of Exchange Servers from a single Task Execution Server.</p>	The dependencies for the individual tasks that comprise this task are described subsequently in this table.

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

Gathering Task Name	Part of Default?	Description	Dependent on
Complete Exchange Server-Level Gathering for Client Access Server	No	<p>A composite task that initiates core Exchange server-level gatherings for Exchange 2010/2013 Client Access Servers (CAS) and Exchange 2016/2019 Mailbox servers. Includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>Virtual Servers</li> <li>Server Properties</li> <li>Server Uptime Performance Counter</li> <li>Reporting Aggregation</li> </ul> <p>Useful for distributed MessageStats deployments in which the Exchange server-level tasks are executed against a collection of Exchange servers from a single Task Execution Server.</p>	The dependencies for the individual tasks that comprise this task are described subsequently in this table.
<b>Individual Gathering Tasks</b>			
Exchange Connectors	Yes	Enumerates the foreign connectors on the source Exchange servers.	No dependencies.
Exchange Mail Contacts	Yes	<p>Enumerates the mail contacts on the source Exchange servers.</p> <p>The gathering also includes additional attributes such as custom attributes (01-15), and attributes such as Department, Telephone Number, and Postal Address. You can add these columns to the mail contact reports using the Insert Field option.</p>	No dependencies.
Exchange Distribution Groups	Yes	<p>Enumerates the Distribution Groups (Mail-enabled Groups) and collects basic attributes such as list name, type, and number of members, on the source Exchange servers.</p> <p>The gathering also includes additional attributes such as custom attributes (01-15), and attributes such as Notes and Description. You can add these columns to the distribution group reports using the Insert Field option.</p> <p><b>NOTE:</b> To store and report on the detailed membership information for distribution groups, you must enable the Distribution Group Membership option on the Organization Properties dialog box. For more information, see <a href="#">Gathering Distribution Group Membership Information</a> on page 80</p>	No dependencies.

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

<b>Gathering Task Name</b>	<b>Part of Default?</b>	<b>Description</b>	<b>Dependent on</b>
Exchange Public Folders	No	<p>A composite task that includes the following gathering tasks:</p> <ul style="list-style-type: none"> <li>Exchange Public Folder Tree Structure Enumeration</li> <li>Exchange Public Folder Tree Structure Analysis</li> <li>Exchange Public Folder Instance Enumeration</li> </ul> <p>Analyzes the MAPI public folder tree structure using the server public folder (Exchange 2010) or analyzes the public folder tree structure on mailbox databases using PowerShell for Exchange 2013 and later.</p> <p>The gathering includes attributes such as custom attributes, storage quota limits, and expiration information.</p>	The tasks that comprise the Exchange Public Folders Task are affected by dependencies as described for each individual task subsequently in this table.
Exchange Public Folder Security	No	Collects public folder permissions and owner information for Exchange 2013 and Exchange 2016/2019 public folders. Required to populate the Public Folder Owners report for Exchange 2013 and later.	Successful Exchange Public Folder Instance Enumeration for the same server.
Exchange Databases	Yes	Gathers all Exchange mailbox and public folder databases, and server drives from an Exchange server.	Successful Organization Structure gatherings for the same Exchange organization.
Exchange Internal Namespaces	Yes	Enumerates the SMTP domains in the Recipient Policies.	No dependencies.
Exchange Mailboxes	Yes	<p>Collects object information regarding Exchange mailboxes such as the mailbox size and any associated quotas.</p> <p>Additional information, such as custom attributes, mailbox object GUID, and user details, is also collected and can be inserted into the mailbox reports using the Insert Field option.</p>	Successful Exchange Databases gathering for the same server.
Exchange Mailbox Security	No	Collects the security information for all Exchange mailboxes. The gathering also collects the send-as and receive-as permissions from Active Directory user access control list (ACL).	Successful Exchange Mailboxes gathering on the same Exchange server.
Exchange Mail-Enabled Objects	Yes	Enumerates Exchange servers for all mail-enabled users, groups, and contacts.	No dependencies.
Exchange Organization Structure	No	<p>Enumerates the servers that comprise an Exchange organization.</p> <p>Runs automatically once a day (at midnight, local time).</p>	No dependencies.



**Table 1. MessageStats Exchange Gathering Task Dependencies.**

<b>Gathering Task Name</b>	<b>Part of Default?</b>	<b>Description</b>	<b>Dependent on</b>
Exchange Public Folder Tree Structure Analysis	No	Processes the Exchange Public folder tree and aggregates replica object count information at the folder level.	Successful Exchange Public Folder Tree Structure Enumeration and Public Folder Instance Enumeration for the same organization.
Exchange Public Folder Tree Structure Enumeration	No	Collects the structure of the MAPI public folder tree on public folder databases for Exchange 2010. Collects the structure of the public folder tree on mailbox databases using PowerShell for Exchange 2013 and later.	Successful Organization Structure, Exchange Databases and Exchange Mailboxes for the same Exchange organization.
Exchange Virtual Servers	Yes	Enumerates the Virtual SMTP servers on the source Exchange server.	Successful Organization Structure gathering for the same Exchange organization.
Exchange Public Folder Instance Enumeration	No	Collects information about public folders and their content on the source server for Exchange 2010 and later.	Successful Public Folder Tree Structure Enumeration for the same organization.
Exchange Server Properties	Yes	Enumerates attributes of the Exchange server including some configuration elements like Circular Logging.	Successful Organization Structure gathering for the same Exchange organization.
Exchange Tracking Logs	Yes	Copies Exchange Tracking logs, processes those files, and optionally archives the tracking logs.	Successful Organization Structure, Exchange Mail-Enabled Objects, Mail Contacts, Distribution Groups, Databases, and Mailbox gatherings for the same Exchange organization.
Mailbox Account Properties	Yes	Resolves attributes of a given mailbox. These attributes include the determination of the account using the applicable SID, additional properties including type of account, and disabled status.	Successful Exchange Databases and Exchange Mailbox gatherings for the same Exchange organization.
Server Uptime Performance Counter	Yes	Gathers and stores the Perfmon counter "uptime" from each source server in the task.	Successful Organization Structure gathering for the same Exchange organization.

**Table 1. MessageStats Exchange Gathering Task Dependencies.**

<b>Gathering Task Name</b>	<b>Part of Default?</b>	<b>Description</b>	<b>Dependent on</b>
Exchange Mailbox Content and Attachments	No	<p>Gathers and stores mailbox content and attachment information from the sources in the task.</p> <p>This task also supports optional search criteria that are used to limit what information is stored in the database. For message content, criteria include subject keyword, size, number of recipients, date, and body keyword. For message attachments, criteria include filename keywords, file extensions, and size.</p> <p><b>NOTE:</b> Mailbox Content and Attachments gatherings can use significant storage space. Ensure the search criteria represents only the minimum gathering and storage requirements, and monitor your MessageStats Database size.</p>	<p>Successful completion of the Default Gathering task.</p> <p>You must select specific mailbox databases or mailboxes on the server that you want to use for the gathering.</p>
Exchange Public Folder Content and Attachments (Exchange 2010 only)	No	<p>Gathers and stores public folder content and attachment information from the sources in the task.</p> <p>You must select specific objects (including public folder databases and public folders) to establish search parameters; criteria for the content of public folders (including subject, size, number of recipients, date, and body); and criteria for filtering the attachment information to be retained (such as filenames, extensions, and size)</p> <p><b>NOTE:</b> Exchange Public Folder Content and Attachments gatherings can use significant storage space. Ensure that search criteria represents only the minimum gathering and storage requirements, and monitor your MessageStats Database size.</p>	<p>Successful completion of the Default Gathering task and Exchange Public Folders tasks.</p> <p>You must select the public folders that you want to use for the gathering.</p>
Reporting Aggregation	Yes	<p>Aggregates Exchange traffic and object count data along a number of reporting dimensions. This task is appended to all other tasks, except Exchange Mailbox Content and Attachments and Exchange Public Folder Content and Attachments.</p>	<p>Successful completion of all other tasks, except Exchange Mailbox Content and Attachments and Exchange Public Folder Content and Attachments.</p>
IIS Log Files/ OWA/ Windows Mobile	No	<p>Collects data from the IIS log files (that are configured using the W3C Extended Log File Format).</p> <p><b>NOTE:</b> You can create an IIS Log Files gathering task only at the individual server level. You cannot create an IIS Log Files gathering task at the Exchange organization level.</p>	<p>Successful completion of the Exchange Mailboxes and the Mailbox Account Properties gathering tasks.</p>

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# Appendix C: Troubleshooting Permission Problems

Throughout MessageStats, there are several locations in which you can specify the security context for the MessageStats scheduler service and for gathering tasks. To allow task gatherings to run in their own process, MessageStats requires that the full user name and password be provided and saved.

When the password for an account that is used in MessageStats is changed, it affects how MessageStats performs. You can also see these issues if an account that is used in MessageStats is disabled or is no longer available.

There are two main areas of MessageStats in which security credential information, along with passwords, is saved. The areas are as follows:

- **MessageStats Scheduler Service**

Windows Service—Account that is used to start the MessageStats Scheduler Service. The account can be modified using the Windows Service Control Manager (SCM). For details, see [Updating the Scheduler Service Security Context](#) on page 125.

DCOM—Credentials that are used to instantiate the MessageStats Scheduler Service COM object. This can be modified in the DCOM Config section of Windows Component Services. For details, see [Updating the Scheduler Service DCOM Credentials](#) on page 125.

If you have the MessageStats client console installed on the computer that hosts the MessageStats Scheduler Service, you can update both the Windows service account and the DCOM configuration using the Scheduler Service Credentials property tab for the MessageStats Server. For details, see [Updating Security Credentials for the Scheduler Service](#) on page 63.

- **MessageStats Tasks**

DCOM—Credentials that are used to instantiate the MessageStats Task Processor COM object. The credentials can be modified using the DCOM Config section of Windows Component Services. For details, see [Updating the Task Processor DCOM Credentials](#) on page 126.

If you have the MessageStats client console installed on the computer that hosts the MessageStats Task Execution Server, you can update the DCOM configuration using the DCOM Credentials property tab for the Task Execution Server. For details, see [Modifying Task Processor DCOM Credentials](#) on page 90.

Thread—Credentials that are used to execute a processing object. When a processing object is created, it is created using the DCOM object. A background worker thread is then created that takes on the credentials. The credentials can be modified using the MessageStats Console, in the properties for the task. For details, see [Changing Task Credentials](#) on page 92.

If a password is changed, there are different security credentials that you must update for each area to ensure that MessageStats operates correctly.

# What are the Symptoms of a Permissions Problem?

This section explains the symptoms that occur if an account is invalid because it does not exist or is disabled or for which the password has expired. Details are provided about how to diagnose if one of the accounts is not valid.

## Symptoms of a Problem with Scheduler Service Permissions

The credentials for the MessageStats Scheduler Service are not widely used so it can be difficult to diagnose if the account password is suddenly invalid. One of the following symptoms can indicate a problem with the account used by the scheduler service:

- The MessageStats Scheduler Service is restarted (either explicitly or due to a machine reboot) but the service fails to restart.
- Within the MessageStats console, you see an error page titled “Unable to Connect to MessageStats Service”. It states that there may be a problem with the account used to run the service, or with the configuration of the DCOM and the RPC service on the computers that host either the scheduler service or the console.
- You see “Access Denied” error messages when you try performing console operations such as navigating the tree or opening property tabs.

## Symptoms of a Problem with Task Processor Permissions

For the MessageStats tasks, an indicator can be that some (or possibly all) tasks immediately fail when they are executed. If the task credential information for a task is incorrect, any execution of that task continually fails. Error details are provided in the task log.

If you view the log and see the following error text, the problem is that the credentials for the task are invalid and must be corrected:

The task activity item was unable to execute due to a problem with the task credentials. The user that was used to execute the task activity item is Domain\User.

In this case, you would correct the credentials that are specified for the task. For more information, see [Updating Default Credentials for Tasks](#) on page 126.

Another symptom might be that task occurrences do not appear in the Task Status view in MessageStats console. The task never appears to be running. Even if you force the task to run using the Run Now command, the task does not appear to start.

Usually the root cause is a DCOM problem. Before a task can perform the gathering work, the task job is created using the specified account. If task creation fails, the task does not appear in the task view. You must correct the credentials used by DCOM for the tasks to execute correctly. For more information, see [Updating the Task Processor DCOM Credentials](#) on page 126.

# Updating Scheduler Service Permissions

For the MessageStats Scheduler Service, there are two locations in which credential information is stored. You can update the account information using two different methods:

- If you have the MessageStats client console installed on the computer that hosts the MessageStats Scheduler Service, you can update both the Windows service account and the DCOM configuration using the Scheduler Service Credentials property tab for the MessageStats Server. For details, see [Updating Security Credentials for the Scheduler Service](#) on page 63.
- If you want to update the credentials directly in Windows, see the sections that follow:  
[Updating the Scheduler Service Security Context](#)  
[Updating the Scheduler Service DCOM Credentials](#)

## Updating the Scheduler Service Security Context

The first location is in the Windows Service Control Manager (SCM). This is the location in which all Windows Services are defined, along with the security context under which the service runs. You can access the SCM in different ways. The simplest way is to select **Control Panel | Administrative Tools | Services**.

### *To update the password for the Scheduler Service*

- 1 In the list of Windows services, select the **Quest MessageStats Scheduler Service**.
- 2 Right-click and select **Properties**.
- 3 Click the **Log On** tab and update the password.
- 4 Once the password is corrected, start the MessageStats Scheduler Service and ensure that the service starts without errors.

## Updating the Scheduler Service DCOM Credentials

The second location is the DCOM Config that exists in the Windows Component Services. This is a Windows application that can be launched from the dcomcnfg.exe executable.

### *To update COM credentials for the Scheduler Service*

- 1 Open the snap-in by entering **dcomcnfg.exe** in the Run window.
- 2 Select **Component Services** and scroll to **DCOM Config**.
- 3 Select the **Quest MessageStats Scheduler Service** object.
- 4 Right-click the object and select **Properties**.
- 5 Click the **Identity** tab to view the MessageStats Scheduler Service account information.
- 6 If you changed the password for the MessageStats Scheduler Service account, update the account password here.

Leave the account set to This User with the correct security credential information specified.

# Updating MessageStats Tasks Permissions

For the MessageStats tasks, there are four locations in which the task processor credential information is stored. You might have the same account used for the scheduler service and for tasks, but you may not.

If you have problems running tasks, you can check the DCOM credentials for the task processor or the task credentials for the individuals tasks:

[Updating the Task Processor DCOM Credentials](#)

[Updating Default Credentials for Tasks](#)

## Updating the Task Processor DCOM Credentials

The first location is the DCOM Config that exists in the Windows Component Services. This is a Windows application that can be launched from the executable, dcomcnfg.exe. The procedure is the same as for the DCOM object for the scheduler service except, in this case, you select the MessageStats Task Processor object.

### *To update DCOM Config credentials*

- 1 Open the snap-in by entering **dcomcnfg.exe** in the Run window.
- 2 Select **Component Services** and navigate to the DCOM Config node.
- 3 Select the **Quest MessageStats Task Processor** object.
- 4 Right-click the object and select **Properties**.
- 5 Click the **Identity** tab to view the MessageStats Task Processor account information.
- 6 Enter the correct security credential information.

Leave the account set to **This User** with the correct security credential information specified.

## Updating Default Credentials for Tasks

The three locations for MessageStats task credential information are in the MessageStats console.

- Default task credentials for all tasks set for the MessageStats Server.
- Specific task credentials set for an individual task.
- Explicit credentials set for the connection server used to connect to an Exchange organization.

Select the task in the task view in the MessageStats Console, right-click and select **Properties** and validate that the correct credentials are specified. If the **Use Default Configuration** check box is checked, you must make the change in the Task Credentials property tab, found under the Tasks node in the MessageStats Console.

## Updating the Default Task Credentials

The first location in the MessageStats console is in the property tab for Tasks. This is the default configuration for task execution if you have not set explicit credential configuration at the task level.

### *To update default task credentials*

- 1 Expand the **MessageStats** node and select **Tasks**.

- 2 Right-click and select **Properties**
- 3 Select the **Task Credentials** tab and update the account and password information.
- 4 Click **Apply**.

## Updating Credentials Set Explicitly for a Task

The second location is in any task that is defined for explicit security credentials. You can determine if explicit security credentials are set for a task by right-clicking on a specific task to see its properties. View the Task Credentials page of the wizard. If the Use Default Configuration check box is not selected, the task is using explicit security credentials.

If there are tasks that reference an account for which the password is changed, you must change the password in the task properties for each task.

## Updating Credentials Set for the Connection Server

The third location is the Connection Server property tab for a specific Exchange organization. In the Connection Server property tab, the security context is set to use default task security context or to use a defined account.

If the configuration is set to use the default security context, and if you set the password correctly in the Task Credentials property tab of the Task properties, that is all that is required. However, if the account is explicitly set, you must reset the password.

### *To update explicit credentials for a connection server*

- 1 Expand the **Exchange Organizations** node in the treeview and select an Exchange organization.
- 2 Right-click and select **Properties**.
- 3 Select the **Connection Server** tab.
- 4 To use different credentials, select **Configure**.
- 5 To use different credentials than the account that is specified for the default Task Credentials, select **Specify Explicit Credentials** and enter the account and password you want.
- 6 Click **Accept**.
- 7 If the validation is successful, click **OK**.

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- Sign up for product notifications.
- Download software and technical documentation.
- View how-to-videos.
- Engage in community discussions.
- Chat with support engineers online.
- View services to assist you with your product.



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