Log Viewer User's Guide

Revision D

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Invensys Systems, Inc.

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Before You Begin

About This Book

This book provides information about the Logger and the Log Viewer snap-in to the System Management Console. The remainder of this book is organized in the following fashion:

- Overview: contains introductory information about the Log Viewer, including general information about the logging function, messages and how to use them.
- Using the Log Viewer: describes procedures for manipulating and using logged messages as a means to troubleshoot your ArchestrA environment.
- The Log Viewer User Interface: contains information about Log Viewer menus, toolbar, dialog boxes and other aspects of the user interface.

You can view this document online or you can print it, in part or whole, by using the Adobe Acrobat Reader's print facility.

Documentation Conventions

This documentation uses the following conventions:

Convention	Used for
Bold	Menus, commands, buttons, icons, dialog boxes and dialog box options.
Monospace	Start menu selections, text you must type, and programming code.
Italic	Options in text or programming code you must type.

Technical Support

Wonderware Technical Support offers a variety of support options to answer any questions on Wonderware products and their implementation.

Prior to contacting technical support, please refer to the relevant chapter(s) in your *Log Viewer User's Guide* for a possible solution to any problem you may have with the Logger or Log Viewer. If you find it necessary to contact technical support for assistance, please have the following information available:

• The type and version of the operating system you are using. For example, Microsoft Windows XP.

- The exact wording of the error messages encountered.
- Any relevant output listing from the Log Viewer or any other diagnostic applications.
- Details of the attempts you made to solve the problem(s) and your results.
- Details of how to recreate the problem.
- If known, the Wonderware Technical Support case number assigned to your problem (if this is an ongoing problem).

CHAPTER 1

Overview

The Log Viewer is an ArchestrATM utility you can use to view messages logged to the Logger on your computer or on a remote computer. The Logger is a system service that records information from ArchestrA-enabled components regarding the activities occurring on your computer. For example, it records startup data and error conditions.

Contents

- System Management Console
- Logger, Log Viewer Functions

System Management Console

The Log Viewer is part of the System Management Console (SMC) suite of utilities you can use to manage the ArchestrA environment. The SMC is a snap-in to the Microsoft Management Console (MMC).

The MMC and each SMC utility provides its own documentation. For more information, click **Help** on the **Action** menu. The first Help book displayed provides information about the MMC utility in general. Each SMC utility is then represented by a Help book below the MMC book.

This document describes the functionality and user interface of the Log Viewer. It describes common features of the MMC only if required to better explain Log Viewer functionality.

Note Aspects of the Log Viewer user interface may look different when installed on different versions of Microsoft® Windows®. Also, the version of MMC installed on your computer may affect the content and behavior of the user interface.

Logger, Log Viewer Functions

The Logger and Log Viewer are automatically installed on any computer on which you install an ArchestrA-enabled component. To start the Log Viewer, click Start, point to Programs and then to Wonderware, and then click System Management Console.

Note If a problem occurs while using an ArchestrA program, always check logged messages prior to calling technical support.

These utilities provide two main functions:

• **Logger**: The background process that stores messages and events in the system. This process occurs without any prompting from you.

You can customize which messages you want to log with the Log Flag Editor. For more information about the Log Flag Editor, see its documentation.

The Logger is installed as a system service, and can be configured as either an auto service or manual service. As an auto service, the Logger is started when you start your computer. As a manual service, you must manually start it through the System Services utility in the Windows' Control Panel. In either case, the logging process always begins when an ArchestrA component sends a message to the Logger.

Caution! Like other services, you can disable the Logger service at any time in the System Services utility. We recommend that you do not do this. Until you enable the Logger service, you may miss important messages.

• Log Viewer: The user interface for viewing messages that are sent to the Logger. You can customize the format and the look and feel of this utility to suit your needs.

CHAPTER 2

Using the Log Viewer

The Log Viewer's main function is to display messages sent to the Logger. By using the filter, mark, find, time range and other functions of the Log Viewer, you can simplify and specify the messages that are displayed.

Also, you can use the Log Viewer to save logged messages to a file and view logged messages previously saved to a file. This chapter describes how to use these and other Log Viewer functions.

Contents

- Typical Log Viewer Usage
- Configure Logger Storage Options
- Searching for Messages
- Using Bookmarks
- Marking the Message Log
- Filtering Messages
- Purging Messages

Typical Log Viewer Usage

The Log Viewer is primarily a troubleshooting tool. After initially installing an ArchestrA-enabled program and on occasion, you might check logged messages to determine whether all processes are functioning well. But typically, you would use the Log Viewer to work through problems you encounter with a DAServer, the IDE or other ArchestrA component.

Note The Log Viewer displays error messages in red-highlighted stripes. These indicate malfunctioning processes and should be resolved quickly. Warning messages are displayed in yellow stripes. These indicate major events in the system.

A good strategy for troubleshooting problems

Gather as much information first about the process that is malfunctioning.
For instance, you attempted to deploy an object in the IDE and a message
was displayed stating the deployment was not completed. Note the
function you attempted and the message you received.

- 2. Open the Log Viewer by clicking Start, pointing to Programs and then to Wonderware, and then clicking System Management Console. In the SMC, select Log Viewer and then the node the IDE is located on. Look for red and yellow messages. Also, use the information you collected about the failed process to search for clues in the logged messages.
- 3. Use the **Find** command on the **View** menu to single out messages by message text or other category of data, or use the **Filter** command on the **View** menu to reduce the number of displayed messages based on message, time range or terminal session criteria. For more information about using these and other Log Viewer functions, see the procedures detailed later.

Windows NT 4.0 and Windows XP Embedded

The Logger can be installed on computers running Windows NT 4.0 and Windows XP Embedded in order to support ArchestrA-enabled components on those computers. But the Log Viewer is not available on those computers. You must use a remotely-installed Log Viewer to configure the Logger and view messages logged on those computers.

In the case of Windows NT 4.0 computers, the operating system does not support the container program for Log Viewer: the Microsoft Management Console (MMC). On a remote computer, use the **New Node** command in the console tree to point to the NT 4.0 computer. Then select the new node in the console tree and configure that Logger just like it was a local one.

In the case of Windows XP Embedded, the memory footprint of the logfile is a concern. Therefore, the Logger is installed in disabled mode. On a remote computer, use the **New Node** command to point to the XP Embedded computer. Then select the new node in the console tree, specify a remote path to store the Logger's logfile and enable logging. (For more information, see the **Store Log Messages in this Path** and **Enable Logging** options in Configure Logger Storage Options.)

Configure Logger Storage Options

You can specify the location of the files containing the Logger messages and other options related to Logger storage.

To configure Logger storage options

- 1. In the Log Viewer, select the Logger node you want to configure.
- 2. On the **Action** menu, click **Configure**.
- 3. On the **Configure** dialog box, select the **Storage** page.

- 4. Use the **Enable Logging** check box to start or stop logging messages on the selected node. Clear the check box to stop logging on the node for all ArchestrA components. When logging is disabled, you can view messages previously logged in the Log Viewer, but fast mark functionality is disabled and access to the Log Flag Editor is unavailable. Select the check box to resume logging immediately. Separate messages are logged and displayed in the message window when logging is enabled and disabled.
- 5. Change the location of your logged files with the **Store Log Messages in this Path** text box. This location can be on your local hard drive or a network share (designate in Uniform Naming Convention [UNC] format; for instance, \\servername\sharename\). If you change this setting, you no longer are able to view previously logged messages. Therefore, you should back up the current messages to a logfile before changing this setting.

Important! Your ArchestrA Admin User credentials must be valid on the network share you choose to store logged messages. The Admin User configured on your computer must have Full Access permissions to the remote network share. If the Admin account on your computer is a Local account, then a matching account must exist on the remote node with Full Access privileges to the share. If the remote path is not accessible, the Logger does not try to log to an alternate path. When you start the Log Viewer, it notifies you of this problem.

Important! Log files should not be stored on a network share unless it is necessary. Depending on the amount of log traffic, storing log files on a network share could have a negative impact on system and network performance.

- 6. Limit the quantity of messages and the amount of disk space stored messages use with the two additional **Storage** page options. Messages are deleted beginning with the oldest ones first. These two options perform an OR operation. In other words, when either setting is encountered, messages are deleted. If your computer has a large hard drive, you can set these options at or near their maximum allowed values (365 days, 10 GB disk space).
- 7. Click **OK** to save the new configuration or **Cancel** to revert to the current settings.

Searching for Messages

The Log Viewer provides two search functions. You can use either the **Find** or **Go To** dialog box to locate a message. Find is a general search function based on five categories of criteria that map to column headings in the message window. Go to is a search function based on bookmarks you previously set. See "Using Bookmarks" for instructions about using the **Go To** dialog box.

To find a message

1. On the **View** menu, click **Find**.

- 2. On the first row, choose a category you can use to logically isolate a particular set of messages. Double-click the category box in the data entry window and type the desired criteria. After typing search data, click outside of the category box to exit edit mode. You can repeat this step over multiple categories to perform an AND operation. In other words, the search function finds only those messages that meet all criteria.
- To add another row of criteria, right-click anywhere in the data entry window and click Add. Columns perform an OR operation. In other words, the search function finds those messages that meet the criteria on one row or the criteria on other rows.
- To remove criteria you have entered in a category box, right-click on the box and click Clear Field. To remove an entire row, right-click on the row and click Delete. To remove all search criteria, click the Clear All button.
- 5. After you have set search criteria as desired, click the **Find Next** button. The first message that meets the criteria you have set is highlighted in the message window. Click **Find Next** again to move to the next message that meets the criteria.
- 6. Click **Cancel** to close the dialog box.

Note The **Process ID** and **Thread ID** categories require numeric data; the others accept alphanumeric characters. You can use both AND and OR operations (multiple categories on multiple rows) to perform complex search functions.

Using Bookmarks

Bookmarks are unique labels you can apply to individual messages for quick access. They differ from marks (see "Marking the Message Log") in that bookmarks are associated with specific messages while marks are messages added below the message that is currently last in the log.

You cannot enter duplicate bookmark names for more than one message, and a message can have only one bookmark.

The message window can display a **Bookmark** column, which is initially hidden by default. To show the **Bookmark** column, right-click on the column header of the message window and click **Show**. In the **Choose Columns** dialog box, click **Bookmarks** in the **Columns Hidden** box, click the **Show** button to move it to the **Columns Shown** box and click **OK**. The **Bookmark** column is added at the far right of the column header. Click and drag it to another position if you want. When the text of a bookmark in the **Bookmark** column is partially obscured, point to it to display the entire bookmark like a tooltip.

You can set bookmarks in two ways: adding a regular bookmark that you can name and setting a fast bookmark that is named for you.

To add a regular bookmark to a message

 Right-click the message and click Add Bookmark on the Bookmark submenu.

- 2. In the Add Bookmark dialog box, either accept the default name (Bookmarkx where x is a number in an ascending sequence) or overwrite it with something more descriptive. You can change the bookmark name in the Bookmarks dialog box at a later time. See "To manage bookmarks" below.
- 3. Click **OK** to set the bookmark or **Cancel** to terminate the process.

To set a fast bookmark on a message

- Right-click the message and click Fast Bookmark on the Bookmark submenu. A default naming sequence is applied to the message (Bookmarkx where x is a number in an ascending sequence).
 Alternatively, you can set a fast bookmark by selecting the message and clicking the Fast Bookmark icon on the toolbar.
- 2. Change the bookmark name to something more descriptive, if necessary, in the **Bookmarks** dialog box at a later time. See "To manage bookmarks" below.

To go to a bookmarked message

- 1. On the **View** menu, click **Go To**.
- 2. In the **Go To** dialog box, enter the name of the message's bookmark by typing it in the box or selecting from the list.
- 3. Click **Go To**. The **Go To** dialog box remains open.
- 4. Use the **Previous** and **Next** buttons to go to the nearest bookmarked message above and below, respectively.
- 5. When you are done searching, click **Close**.

Note You cannot go to bookmarked messages that are currently hidden by a filter. If you cannot find the desired message, disable filtering and try again.

To manage bookmarks

- 1. On the View menu, click Bookmarks.
- 2. In the **Bookmarks** dialog box, you can manage current bookmarks and create new ones. The bookmark list shows the current set of bookmark names and associated **Message No.** (the same number as the **No.** column in the message window). The bookmark list provides several functions.
- 3. For instance, to rename a bookmark, select it, press **F2** and type the new name. Note that each bookmark must have a unique name; so you cannot bookmark two messages with the same name.
- 4. To go to a bookmarked message, double-click on it in the list or select it and click **Go To**.
- 5. To remove one or all bookmarks from your logged messages, select a message and click **Remove**, or click **Remove** All.
- 6. To add a new bookmark, select the message you want to bookmark in the message window and click **Add**. This function is comparable to a fast bookmark. Rename it by pressing **F2**.
- 7. When you are done, click **Close**.

Note Bookmarks are not saved when you quit the Log Viewer application. To mark your message log more permanently, use the **Mark** command on the **View** menu.

Marking the Message Log

Marks are messages you can insert into your message log to designate events or segments of messages. They differ from bookmarks (see "Using Bookmarks") in that marks are messages added below the message that is currently last in the log while bookmarks are labels associated with existing messages.

You can create marked messages in two ways: adding a regular mark that you can name and adding a fast mark that is named for you.

To add a regular mark message

- 1. On the View menu, click Mark.
- 2. In the **Mark** dialog box, either accept the default name (Mark) or overwrite it with something more descriptive. You cannot change the marker name at a later time.
- 3. Click **OK** to add the marker message to the end of all logged messages, or **Cancel** to terminate the process.

To add a fast mark message

1. Click the **Fast Mark** icon on the toolbar. A marker message with the default name (Mark) is added to the end of all logged messages.

Note Mark and Fast Mark are only available on nodes whose Logger is currently enabled. Refer to Configure Logger Storage Options for more information about enabling and disabling logged messages.

Filtering Messages

During normal operations in an ArchestrA environment, many messages are logged to the Logger. If a program is malfunctioning or some component has been configured outside of acceptable ranges, the number of messages can increase significantly. One way to reduce the number of messages being displayed in the message window is to use the **Filter** dialog box.

Use filtering to display a subset of all logged messages based on specified criteria. The **Filter** dialog box provides three sets of criteria you can use to reduce the amount of messages displayed. You can use one or more of these sets of criteria at a time to help troubleshoot problems in the ArchestrA environment.

Note Filtering does not delete logged messages, but only affects the display of messages in the message window. To view all logged messages again, disable the filter by clicking the **Enable/Disable Message Filter** icon on the toolbar or clearing the **Show Time** and **End Time** check boxes. You can enable the filter at a later time because the filtering specifications are still set in the background.

To filter messages based on message characteristics

- 1. On the **View** menu, click **Filter**.
- 2. On the Filter dialog box, select the Messages page. The first column in the data entry window is Type. There are two possible types of criteria: Show and Hide. When a row is type Show, messages that meet the criteria set are displayed in the message window. When a row is type Hide, messages that meet the criteria set are not displayed in the message window. All other columns in the data entry window map to columns displayed in the message window. The first row in the data entry window is not editable and cannot be deleted, although you can disable it by clearing the check box.
- 3. To add filtering criteria, click the New Filter icon. A new Show type row is displayed. Click the Type box to switch to Hide type. Double-click a category (Process ID, Thread ID, Log Flag, Component or Message) and type filtering criteria. Alternatively, you can add another row by right-clicking a category header and clicking Add on the shortcut menu. The new row is added and the category box is set to edit mode automatically. When you are finished typing the filtering criteria, click outside of the box.
- 4. To filter messages based on multiple criteria, use more than one category box in a row or more than one row. Data columns perform an AND operation (filter for messages that meet both criteria). Data rows perform an OR operation (filter for messages that meet either criteria).
- 5. To delete a row, select it and click the **Delete Filter** icon. To delete all rows except the first one, click the **Delete All** button.
- 6. To delete criteria from a category box, right-click in the box and click **Clear Field** from the shortcut menu.
- 7. Click **OK** to set the filtering criteria and close the **Filter** dialog box. Click **Cancel** to close the **Filter** dialog box without setting the filtering criteria.

Note Once you have set filtering criteria, you can switch filtering on and off with the **Enable/Disable Message Filter** icon on the toolbar. Enable the filter and only messages that match filtering criteria are displayed. Disable the filter and all logged messages are displayed.

To filter messages based on a time range

- 1. On the **View** menu, click **Filter**.
- 2. On the **Filter** dialog box, select the **Time Range** page.
- 3. Determine whether you want to filter messages based on a start time, an end time or both.

- 4. To filter based on a start time, select **Messages On** in the **From** box. The date and time options are made available. Click in any field (month, day, year, hours, minutes, seconds) and type the desired data. Also, you can click the down arrow in the date box to display a calendar of the current month. Use the right and left arrows to move between months. Select the desired data, which appears in the date box. Also, you can select an aspect of the time box and use the up and down arrows to roll up or down to the setting you desire.
- 5. To filter based on an end time, select **Messages On** in the **To** box. The date and time options are made available. The same functions for date and time described in step 4 apply.
- 6. Click **OK** to set the filtering criteria and close the **Filter** dialog box. Click **Cancel** to close the **Filter** dialog box without setting the filtering criteria.

Note The message window immediately displays messages based on this time range criteria. If you used a **From** setting, the **Start Time** check box in the time header is automatically selected and the new filter settings are shown. If you used a **To** setting, the **End Time** check box in the time header is automatically selected and the new filter settings are shown.

To filter messages based on a terminal session

- 1. On the **View** menu, click **Filter**.
- 2. On the Filter dialog box, select the Terminal Sessions page. The first column in the data entry window is Type. There are two possible types of criteria: Show and Hide. When a row is type Show, messages that meet the criteria set are displayed in the message window. When a row is type Hide, messages that meet the criteria set are not displayed in the message window. The first row in the data entry window is not editable and cannot be deleted, although you can disable it by clearing the check box.
- 3. To add filtering criteria, click the **New Filter** icon. A new **Show** type row is displayed. Click the **Type** box to switch to **Hide** type. Double-click the **Session ID** box and type filtering criteria. Alternatively, you can add another row by right-clicking a column header and clicking **Add** on the shortcut menu. The new row is added and the box is set to edit mode automatically. When you are finished typing the filtering criteria, click outside of the box.
- 4. To filter messages based on multiple sessions, use more than one row. Data rows perform an OR operation (filter for messages that meet either criteria).
- 5. To delete a row, select it and click the **Delete Filter** icon. To delete all rows except the first one, click the **Delete All** button.
- To delete criteria from a Session ID box, right-click in the box and click Clear Field from the shortcut menu.
- 7. Click **OK** to set the filtering criteria and close the **Filter** dialog box. Click **Cancel** to close the **Filter** dialog box without setting the filtering criteria.

Note Once you have set filter criteria, you can switch filtering on and off with the **Enable/Disable Message Filter** icon on the toolbar. Enable the filter and only messages that match filtering criteria are displayed. Disable the filter and all logged messages are displayed.

Purging Messages

Logged messages are purged automatically according to parameters set on the **Storage** page of the **Configure** dialog box (see "Configure Logger Storage Options" for more information). Use the **Purge** dialog box to remove messages before reaching those set limits.

To purge existing messages from the Logger

- 1. Click **Purge** on the **Messages** submenu of the **Action** menu.
- 2. In the **Purge** dialog box, choose the option you want.
- 3. Select **Purge All Log Messages** to clear all messages from the Logger.

Caution! You cannot undo the purge function. Several Log Viewer functions like **CTRL**+**R** clear the messages displayed in the message window but have no effect on the messages logged to the Logger. If you want to simply clear the Log Viewer's message window, do not use **Purge**. **Purge** actually deletes the messages from the Logger.

- 4. Select **Purge Log Message Created Before** to clear all messages from the Logger before a specified date and time.
- 5. Click Cancel to leave all messages currently in the Logger. Click OK to execute the type of purge you selected. After you click OK, you cannot reverse this process. You are prompted to create a backup file (.aaLGX extension) of the messages to be purge.
- 6. Click **Yes** to create a backup file and **No** to continue with the purge. If you click **Yes**, the **Create Back-Up** dialog box is displayed. Set the path and filename for the backup file and click **Save**. If you click **Cancel**, the purge is executed without making a backup file.

CHAPTER 3

The Log Viewer User Interface

The Log Viewer is a Microsoft Management Console (MMC) snap-in that belongs to a suite of utilities called the System Management Console (SMC). This chapter describes the Log Viewer's user interface.

Note Aspects of the Log Viewer may vary in appearance when installed on different versions of Microsoft® Windows®. Also, the version of MMC installed on your computer may affect the appearance of the Log Viewer.

Contents

- The MMC Console
- Menu Bar
- Toolbar
- Console Tree
- Details Pane
- Shortcut Menus for Log Viewer
- Console Tree Shortcut Menu Commands
- Message Window Shortcut Menu Commands
- Supporting Dialog Boxes

The MMC Console

The Log Viewer user interface is hosted by the MMC console, and it is contained in the hierarchy below the ArchestrA System Management Console (SMC). For more information about the MMC, click **Help** on the **Action** menu. The first Help book displayed refers to the generic MMC utility.

This document describes the functionality and user interface of the Log Viewer only. It describes common features of the MMC only if required to better explain Log Viewer functionality.

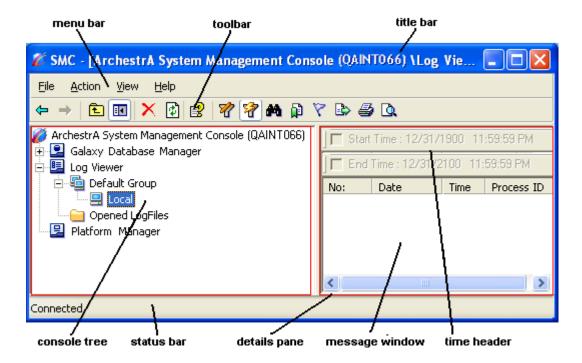
From the MMC console, you can access drop-down menus, context menus, and dialog boxes for viewing and managing messages sent to the Logger.

The Log Viewer user interface is comprised of the following options:

Title bar

- Menu bar
- Toolbar
- Console tree
- Details pane, comprised of the time header and message window
- Status bar

See the image below for the location of these options, and subsequent sections for desciptions of their functionality.



The contents of each of these options is dynamic and changes depending on which item is selected in the console tree or message window. The title bar displays the item selected in the console tree. The status bar displays either the condition of the item selected in the console tree or a brief description of the menu bar command you point to.

Menu Bar

The MMC controls some menu content. See *MMC Help* for information about those commands. Log Viewer provides commands on the following menus: **Action** and **View**. These menus are dynamic depending on which item is selected in the console tree or message window.

The Log Viewer adds the following commands to each of the menus shown below.

- Action menu
 - About Log Viewer: Use this command to open the About Log Viewer dialog box in which you can determine software versioning and other information.

- Configure: Use this command to open the Configure dialog box in which you can set global parameters for your local Log Viewer and the Logger you are currently connected to.
- Connect: This command provides a submenu containing Local and Remote commands. Use the Local command to connect to the Logger on your computer. Use the Remote command to open the Connect dialog box in which you can designate a remote computer from which to view its logged messages. The remote node is always added under Default Group.
- Log Flags: Use this command to start the Log Flag Editor utility in which you can control the types of messages being logged by the Logger on the selected node.
- Messages: This command provides a submenu containing Export, Purge and Print commands. Use the Export command to open the Export dialog box in which you save to a file all currently displayed messages. Use the Purge command to open the Purge dialog box in which you can manually delete messages from the Logger. Use the Print command to open the Microsoft Print dialog box from which you can print all currently displayed messages.
- Monitor: Use this command to start the Log Monitor utility in which
 you can monitor more than one Logger at once. For more information
 about the Log Monitor, refer to that utility's documentation. Note that
 the Log Monitor requires Microsoft's .NET Framework installed on
 your computer. If you have not installed it, this command is not
 available.
- New: This command provides a submenu containing Node and Node Group commands. Use the Node command to add a node under a node group. Use the Node Group command to create a new node group under which you can add and organize nodes. Use these two commands to best organize local and remote notes on which you want to monitor and manage logged messages.
- Open Log File: Use this command to open for viewing a saved logfile of past logged messages.

• View menu

- **Filter**: Use this command to open the Filter dialog box in which you can set criteria for displaying a subset of all logged messages.
- Find: Use this command to open the Find dialog box in which you can search through the displayed messages for ones that meet specified criteria.
- Go To: Use this command to open the Go To dialog box in which you can choose a message to go to based on its bookmark name.
- **Bookmarks**: Use this command to open the Bookmarks dialog box in which you can manage bookmarks in your message log.
- Mark: Use this command to open the Mark dialog box in which you
 can add a marker line after the last message listed in the message
 window. In the Mark dialog box, you can enter explanatory text for
 setting the mark in that position.

 Choose Columns: Use this command to open the Choose Columns dialog box in which you can customize the column headings in the message window.

Toolbar

The Log Viewer toolbar is comprised of icons that provide quick access to frequently used commands. The toolbar is dynamic depending on which item is selected in the console tree or message window. All possible icons are shown below, accompanied by descriptions of each. The icon name is based on the tooltip that is displayed when you point to it.

Icon	Icon Name	Description
4	Back	Allows you to jump backwards through a sequential history of previous selections, if any, in the console tree. This command is helpful if you have hidden the console tree.
Ŷ	Forward	Allows you to jump forward through a sequential history of previous selections, if any, in the console tree. This command is helpful if you have hidden the console tree.
£	Up One Level	Allows you to select the item next highest in the console tree hierarchy. This command is helpful if you have hidden the console tree.
	Show/Hide Console Tree	Toggles between showing and hiding the console tree.
×	Delete	Deletes the selected item in the console tree.
\$	Refresh	Updates the messages in the message window.
B	Export List	Opens the Microsoft Save As dialog box, enabling you to save an ASCII file (.TXT) containing the console tree hierarchical structure.
1	Help	Opens help for the MMC, the Log Viewer and other SMC utilities.
*	Filter	Opens the Filter dialog box (see "Supporting Dialog Boxes"), in which you can set filtering criteria for viewing only certain logged messages.
智	Enable/Disable Message Filter	Toggles filtering function on and off. When toggled on, only those messages which meet the criteria set in the Filter dialog box are displayed in the message window.

Icon	Icon Name	Description
#4	Find (Ctrl+F)	Opens the Find dialog box (see "Supporting Dialog Boxes"), in which you can specify criteria to search for a unique logged message in the message window.
P	Fast Bookmark	Sets a bookmark for the highlighted message in the message window. The bookmark is given a default name, Bookmark where x is a number in an ascending sequence.
8	Fast Mark	Adds a marker line after the last message listed in the message window. Use to mark sections of messages for special purposes. If you want to add a description for the mark, use the Mark command on the Action menu, which opens the Mark dialog box (see "Supporting Dialog Boxes").
	Export	Opens the Export dialog box (see "Supporting Dialog Boxes"), enabling you to save to file (.aaLGX extension) all messages currently displayed in the message window.
4	Print (Ctrl+P)	Opens the Microsoft Print dialog box, from which you can print all messages displayed in the message window.
Q.	Print Preview	Opens the print preview screen (see "Supporting Dialog Boxes"), which is displayed in the message window. This screen displays all messages as they would be printed. This icon is the only access to this function.

Note Some of the toolbar icons described above may not be displayed. Click the MMC's **Customize** command on the **View** menu to open the **Customize View** dialog box. By default, all components except the description bar are enabled. Subsequent customizations are saved and displayed the next time you run the Log Viewer.

Console Tree

The console tree is a hierarchical structure beginning at the ArchestrA System Management Console (SMC) root and containing all installed SMC utilities. The Log Viewer hierarchy contains the **Default Group**, **Local** node, remote nodes and a folder that contains logfiles previously saved.

If the local node is part of a Galaxy (in other words, if an AppServer WinPlatform object has been deployed to it), the Galaxy is displayed as a group. All platforms configured in the Galaxy are automatically displayed under the Galaxy group.

You can rename **Default Group** but not the **Local**, Galaxy group or platform nodes. You cannot delete any of them. You cannot add or remove nodes in the Galaxy group. Nodes added to **Default Group** can be deleted.

The contents of the message window changes as you select items in the console tree.

Details Pane

The details pane is comprised of four main elements:

- Description Bar: Displays the name of the item selected in the console tree. This element is hidden by default. Use the Customize dialog box to display it (click Customize on the View menu).
- **Time Header**: Displays the time range set in the Filter dialog box. To enable each time setting (**Start Time** and **End Time**), select the check box. To disable either time range setting, clear the check box.
- Column Header: Displays descriptive titles for each displayed column.
 You can rearrange the headers by clicking and dragging them to another
 location on the column header. To further customize headers, click
 Choose Columns on the View menu, which opens the Choose Columns
 dialog box.
- Message Window Displays all logged messages, just those messages
 determined by filtering criteria or just messages contained in a logfile. To
 view details of a specific message, double-click it to open the Message
 Details dialog box.

Shortcut Menus for Log Viewer

A shortcut menu is a set of commands displayed when you right-click in the user interface. The Log Viewer provides several shortcut menus in the console tree and message window areas. These menus are dynamic depending on which item is in focus, which item you right-click on and which commands apply to the item.

The same commands in shortcut menus are sometimes displayed in the menu bar, and they have the same function. Some dialog boxes also use shortcut menus, and those commands do not appear on the menu bar. See descriptions of individual dialog boxes in Supporting Dialog Boxes for information about those shortcut menus.

Note The MMC also provides commands for shortcut menus. See *MMC Help* for descriptions of those commands.

Shortcut menu commands are described in two groups: console tree commands and message window commands.

Console Tree Shortcut Menu Commands

Right-click **Log Viewer**, **Default Group**, **Local**, a remote node name, **Opened Log Files** or a log flag filename in the console tree, and a subset of the following possible commands is displayed along with MMC-provided commands.

Note These shortcut menus are dynamic depending on which item is in focus, which item you right-click on and which commands apply to the item. Some commands displayed are provided by the MMC. The ones provided by the Log Viewer are shown below.

Several commands display submenus which are indented in the following list. See "Menu Bar" for descriptions of these commands.

- About Log Viewer
- Configure
- Connect
 - Local
 - Remote
- Log Flags
- Messages
 - Export
 - Purge
 - Print
- Monitor
- New
 - Node
 - Node Group
- Open LogFile
- View
 - Filter
 - Find
 - Go To
 - Bookmarks
 - Choose Columns
 - Mark

Message Window Shortcut Menu Commands

Right-click in the message window and a subset of the following possible commands is displayed along with MMC-provided commands.

Note These shortcut menus are dynamic depending on which item is in focus, which item you right-click on and which commands apply to the item. Some commands displayed are provided by the MMC. The ones provided by the Log Viewer are described below.

Several commands display submenus which are indented in the following list.

Bookmark

- **Fast Bookmark**: Use to set a bookmark for the selected message with the name Bookmark*x*, where *x* is a number in an ascending sequence. If the message already has been bookmarked, this command is unavailable.
- Add Bookmark: Use to open the Add Bookmark dialog box in which
 you can set a bookmark for the selected message with a name of your
 choosing. If the message already has been bookmarked, this
 command is unavailable.
- Remove Bookmark: Use to delete a bookmark for the selected message. If the message has no bookmark, this command is unavailable.
- **Copy**: Use to copy the selected message or text to the Windows clipboard.
- **Details**: Use to open the Message Details dialog box.
- Hide: Use this command to hide the column heading you are pointing to.
 To reverse this command, right-click the column header, click Show and use the Choose Columns dialog box to move the hidden column heading to the Columns Shown box.
- **Print**: Use to open the Print dialog box.
- Send To
 - NotePad: Use to display the selected message in Microsoft's Notepad.
 - Mail Recipient: Use to send the selected message in an email. If you do not have a configured email client, you are prompted to set one up.
- Show: If you right-click on the column header, this command opens the Choose Columns dialog box. If you right-click on a message, the following commands are available.
 - Time Header: Use this command to switch on and off the time header part of the details pane. The check mark indicates current status.
 - **Column Header**: Use this command to switch on and off the column headings in the details pane. The check mark indicates current status.

Shortcut Keys

Shortcut Key	Associated Menu Command	Description
ALT+F2	Bookmarks on the View menu	Opens the Bookmarks dialog box.
CTRL+A		Selects all messages in the message window.

Shortcut Key	Associated Menu Command	Description
CTRL+C	Copy on shortcut menu in text box or on selected message	Copies the selected messages to clipboard.
CTRL+F	Find on the View menu	Opens the Find dialog box to search messages in the message window.
CTRL+F2		If the selected message is not already bookmarked, does a fast bookmark. If the selected message is already bookmarked, removes the bookmark.
CTRL+G	Go To on the View menu	Opens the Go To dialog box to choose a bookmark to go to.
CTRL+P	Print on Messages submenu of the Action menu	Prints displayed log messages.
CTRL+R		Clears the message window by setting and enabling the current time as the Start Time for the filter.
CTRL+SHIFT+F2		Removes all bookmarks in the message window.
DELETE	Delete on the Action menu	Deletes the selected Node/Node Group from the console tree. Exception: you cannot delete the Default group, Local , a Galaxy group or platform nodes. Nodes added to the Default group can be deleted.
ENTER	Details on shortcut menu on selected message	Opens the Message Details dialog box for the selected message.
F2		From the console tree, renames the selected node group (exception: you cannot rename the Local , Galaxy group or platform nodes). From the message window, goes to the next bookmark. From the Bookmarks dialog box, puts selected bookmark in rename mode.

Shortcut Key	Associated Menu Command	Description
F5	Refresh on the Action menu	Refreshes the message window.
SHIFT+F2		Goes to the previous bookmark.

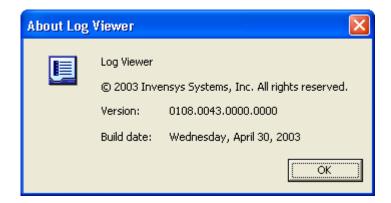
Supporting Dialog Boxes

In the process of using the menus and commands of the Log Viewer, you might open one of the following dialog boxes. These dialog boxes are displayed apart from the MMC user interface and allow you to configure the underlying functions of the Logger and Log Viewer. These dialogs are described in detail later.

About Log Viewer Dialog Box

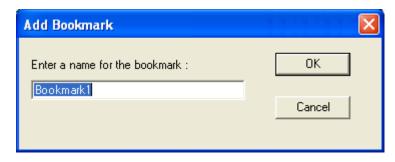
Open this dialog box by selecting **Log Viewer** in the console tree and clicking **About Log Viewer** on the **Action** menu.

Use this dialog box to determine software version and other information about the Log Viewer. The following image is shown as an example.



Add Bookmark Dialog Box

Open this dialog box by right-clicking on a message in the message window and then clicking **Add Bookmark** on the **Bookmark** submenu of the shortcut menu.



Use this dialog box to set a custom bookmark for the selected message in the message window. Default text is Bookmarkx, where x is an ascending sequence of numbers. Overwrite the default text with a descriptive name.

You cannot enter duplicate bookmark names for more than one message, and a message can have only one bookmark.

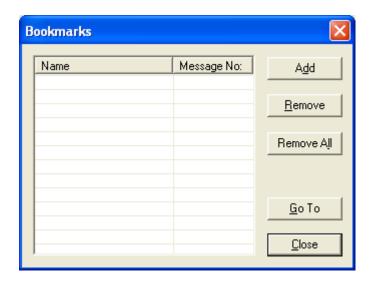
Point to the message in the message window to display its bookmark, which is displayed like a tooltip. You can also view all bookmarks by opening the Bookmarks dialog box.

Bookmarks Dialog Box

Open this dialog box by clicking Bookmarks on the View menu.

Use this dialog box to manage and go to bookmarks in your message log.

Note Once a log message has been bookmarked, it cannot be given another bookmark.

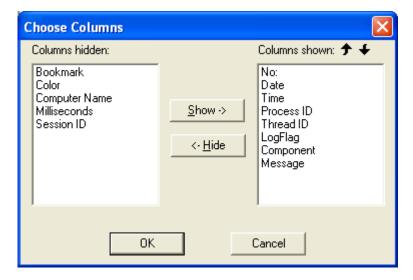


The Bookmarks dialog box is comprised of the following options:

- Bookmark List: Use this list to manage and go to bookmarks in your message log. The Name column shows the bookmarks and the Message No. column corresponds to the No. column in the message window. Rename a bookmark by selecting it and pressing F2. Go to (highlight) a message in the message window by double-clicking the bookmark in the list (or by selecting it and clicking the Go To button). Manage bookmarks in the list with the Add, Remove and Remove All buttons.
- Add button: Use to add a bookmark to the list that is associated with the message selected in the message window. The new bookmark is given a default name; press F2 to rename it.
- **Remove** button: Use to remove the selected bookmark from the list.
- Remove All button: Use to remove all bookmarks from your logged messages.
- Go To button: Use to highlight the selected message in the message window.

Choose Columns Dialog Box

Open this dialog box in two ways for two distinct purposes. To manage the columns in the message window, open it by clicking the **Choose Columns** command on the **View** menu. To manage the columns in the Message Details dialog box, open this dialog box by right-clicking on a column heading and then clicking **Show**.



The Choose Columns dialog box is comprised of the following options:

- Columns Hidden box: displays the headings not displayed in either the message window or Message Details dialog box.
- Columns Shown box: displays the headings displayed in either the
 message window or Message Details dialog box. The headings from top to
 bottom are displayed in the same order, left to right, in the message
 window or Message Details dialog box.

- Show button: moves a highlighted heading from the Columns Hidden box to the Columns Shown box.
- **Hide** button: moves a highlighted heading from the **Columns Shown** box to the **Columns Hidden** box.
- Up and down arrows: moves a highlighted heading in the Columns
 Shown box up or down in the list. The headings from top to bottom are
 displayed in the same order, left to right, in the message window or
 Message Details dialog box.

Note These settings are saved to your user profile, and are displayed on subsequent uses of the Log Viewer. The user interface displays the user profile settings for other users when they log on to the same computer.

Configure Dialog Box

Open this dialog box by clicking **Configure** on the **Action** menu.

Use this dialog box to set global parameters for your local Log Viewer and the Logger you are currently viewing messages from.

Caution! Changes to settings on the **Storage** page of this dialog box affect the Logger you are currently connected to, including a Logger located on a remote computer. If you intend to change storage parameters for your local Logger, ensure that you are connected to it (select **Local** in the console tree). Also, be cautious when changing default values on either page of this dialog box (such as the total disk space allowed for storing messages). Changes to these values may impact overall system performance.

The Configure dialog box is comprised of two pages: **Log Viewer** and **Storage**.

See "Configure Logger Storage Options" in "Using the Log Viewer" for a detailed procedure about using this dialog box.

Log Viewer Page



The **Log Viewer** page is comprised of the following options:

 Check for new log messages every ... milliseconds: Use to set how often your local Log Viewer checks for new messages logged to the Logger you are connected to. Default value is 1000 ms, minimum is 100 and maximum is 3600000 (1 hour).

Caution! Setting this option to a very small value may impact system performance.

- Enable Live Scrolling: Use this check box to enable/disable live scrolling in the message window. Default value is enabled. When live scrolling is enabled and you are viewing the end of the displayed logged messages, a new message that appears on-screen causes the message at the top of the message window to disappear from view. When live scrolling is disabled, you must scroll down to see new messages appended to the list of messages. This function operates only when you are viewing the end of the displayed logged messages. If the list of messages extends beyond the size of the message window and you manually scroll to view messages in the middle of the list, you must scroll down to see new messages appended to the list.
- Keep Log Viewer Always on Top of Other Windows: Use this check box to keep the Log Viewer on your screen when you switch programs or windows. Default value is disabled.

- Cache Only ... Messages in the View: Use this box to set the number of
 messages shown in the message window that are stored in cache. Default
 value is 200, minimum is 1 and maximum is 1,000. If you attempt to view
 logged messages outside of this limit, the Log Viewer must recache a new
 set of data.
- Show Only the First ... Characters in the Message Column: Use this box to set the maximum number of characters displayed for any message in the Message column of the message window. Default value is 256, minimum is 1 and maximum is 8,192.

Storage Page



The **Storage** page is comprised of the following options:

- Enable Logging: Use this check box to start or stop logging messages on the selected node. Clear the check box to stop logging on the node for all ArchestrA components. When logging is disabled, you can view messages previously logged in the Log Viewer, but fast mark functionality is disabled and access to the Log Flag Editor is unavailable. Select the check box to resume logging immediately. A message is logged and displayed in the message window indicating that logging has been enabled or disabled. Default setting is enabled except on Windows XP Embedded computers.
- Store Log Messages in this Path: Enter the desired path for the files that store all logged messages. Either type the desired path or use Browse to explore. Network drives are permitted, for which you must use Uniform Naming Convention (UNC) format (such as, \\servername\sharename). After you click OK, the path is validated for being local to the computer.

Important! Your ArchestrA Admin User credentials must be valid on the network share you choose to store logged messages. The Admin User configured on your computer must have Full Access permissions to the remote network share. If the Admin account on your computer is a Local account, then a matching account must exist on the remote node with Full Access privileges to the share. If the remote path is not accessible, the Logger does not try to log to an alternate path. When you start the Log Viewer, it notifies you of this problem.

WARNING! If you change this path, you will no longer be able to view messages previously logged to files in the current path. Before changing this path, we recommend that you first export all messages to file. Use the **Export** command on the **Messages** submenu of the **Action** menu to create the export logfile (.aaLGX extension). Then, you can view those messages by clicking **Open LogFile** on the **Action** menu and opening the export logfile.

- Delete Log Messages Older Than ... Days: Type the number of days after which logged messages are deleted, beginning with the oldest ones.
 Default value is 0 days (unlimited), maximum is 365 days.
- Limit the Total Diskspace Used for Storing Log Messages to ... MB: Type the size limit (in megabytes) of disk drive storage allowed for all logged messages. Default value is 5000 MB, minimum is 0 (unlimited) and maximum is 10000 (10 GB).

WARNING! If you set the **Limit the Total Diskspace Used for Storing Log Messages to ... MB** parameter to zero (0), you should only do so when you are first starting your application. During normal runtime operation, we recommend that you set this parameter to another appropriate value. Leaving this value at zero could compromise the integrity of the components of your application running on that computer.

The Delete Log Messages Older Than ... Days and Limit the Total Diskspace Used for Storing Log Messages to ... MB parameters operate as an OR function. In other words, when either condition is reached, logged messages are deleted, beginning with the oldest ones. For instance, if total allowed disk space is reached before the number of days allowed before deletion setting, logged messages are deleted.

Connect Dialog Box

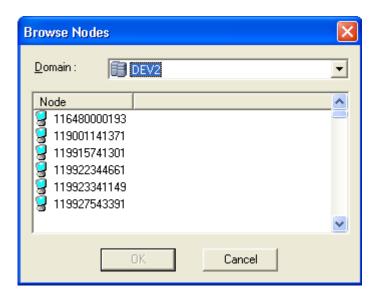
To open this dialog box, point to **Connect** on the **Action** menu and then click **Remote**.



Use this dialog box to view messages stored by the Logger on a remote computer. You can then use filter, find and other Log Viewer functions to customize the messages displayed. You can change log flags with the Log Flag Editor for a remote node's Logger.

Caution! You can **Mark** (and **Fast Mark**) when viewing the logged messages on a remote note. Doing so places marks in those logged messages which are then displayed on the Log Viewer displays of local users of the remote node.

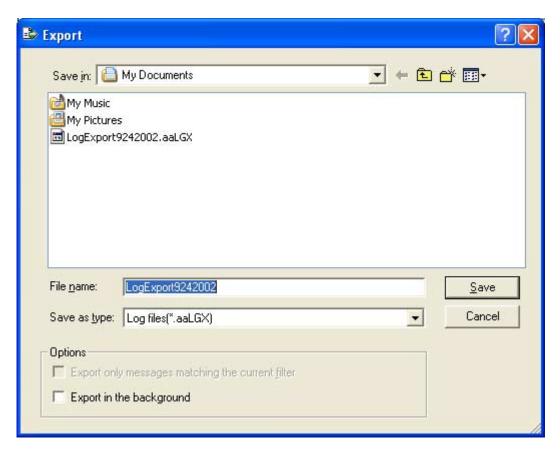
Type a remote computer's name in the text box, choose one from the list or click **Browse** to display the Browse Nodes dialog and explore your network for a remote computer.



Use the Browse Nodes dialog box to explore your network for the remote computer of interest and click **OK**. Your selection is then displayed in the **Computer Name** box of the Connect dialog box. Click **Cancel** to return to the Connect dialog box, in which previous settings are displayed.

Export Dialog Box

Open this dialog box by clicking the **Export** command on the **Messages** submenu of the **Action** menu.



Use this dialog box to store the currently displayed log messages in a logfile (.aaLGX extension). Default filename provided is LogExport<date in 9242002 format>. Edit the filename as appropriate.

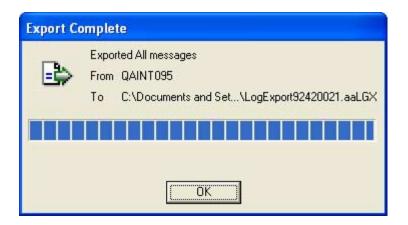
This dialog box is comprised of options that are typical for the Microsoft Save As dialog box. Explore for the desired location for the logfile, create a new folder, if necessary, and enter the desired filename. The Log Viewer provides two additional options:

- Export only messages matching the current filter: use this option to save to file only messages meeting filtering criteria currently in effect. This option is unavailable when a filter is not currently in effect. Select the check box to save only filtered messages. Clear the check box to save all logged messages, including those that do not meet the filtering criteria in effect.
- Export in the background: use this option to make the Log Viewer user interface available during export. If you clear this check box and click Save, Log Viewer commands and functions are unavailable until export is complete. If you select this check box and click Save, you can then use all of the commands and functions of the Log Viewer while export is in progress. Either way, the contents of the resulting export file is the same. This option is useful when you are exporting a large number of logged messages, which could take a long time to complete.

When you are done, click **Save** to store the logged messages to the file. A progress dialog box is displayed. Click **Cancel** to terminate the export process.

Note Export performs a snap-shot function. In other words, when you click **Save** on the Export dialog box, only messages at that time are saved to file. New messages that are sent to the Logger while the export is in progress are not saved.

When the export function is finished, click **OK** in the Export Complete dialog box.



Filter Dialog Box

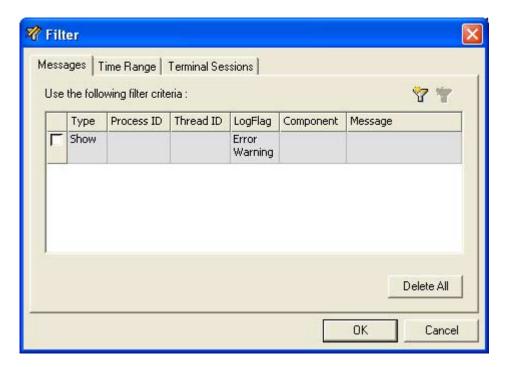
Open this dialog box by clicking **Filter** on the **View** menu.

Use this dialog box to set criteria for displaying a subset of all logged messages in the message window. It is comprised of three pages: **Messages**, **Time Range** and **Terminal Sessions**. Use the criteria on one page or on more than one page at a time to filter displayed messages.

In the **Messages** page, you can use characteristics of messages to filter for specific messages. The message window columns (such as **Process ID**, **Log Flag** and **Message**) are the characteristics you use to filter messages. In the **Time Range** page, you can use timestamp criteria to filter for specific messages. The Log Viewer is also Terminal Services aware. Use the **Terminal Sessions** page to filter for session identifiers. For instance, you can display only those messages originating from applications running under a current session or from all terminal sessions.

See "Filtering Messages" in "Using the Log Viewer" for a detailed procedure about using this dialog box.

Messages Page



The Messages page is comprised of the following options:

- Data entry window: use this window to specify filtering criteria. Each column, except **Type**, maps to a column heading in the message window. The **Type** column and its enabling check box determine whether the criteria set in the other columns is displayed (type: **Show**) or not (type: **Hide**). The first row (Error Warning in the **Log Flag** column) is not editable and cannot be deleted, although you can clear the **Show** check box. Click the **Type** box of a new row to toggle between **Show** and **Hide**, and double-click a category box to type filter criteria. Click outside of the box you are editing to set that parameter. Data rows perform an AND operation (filter for messages that meet both criteria). Data columns perform an OR operation (filter for messages that meet either criteria). Use both AND and OR operations (multiple categories on multiple rows) to perform complex filters.
- **New Filter** icon: use to add a new row of filter criteria. After setting filtering criteria, the check box is automatically enable for that row.
- **Delete Filter** icon: use to remove a highlighted row of filter criteria.
- **Delete All**: use this button to clear all filter criteria from this page.

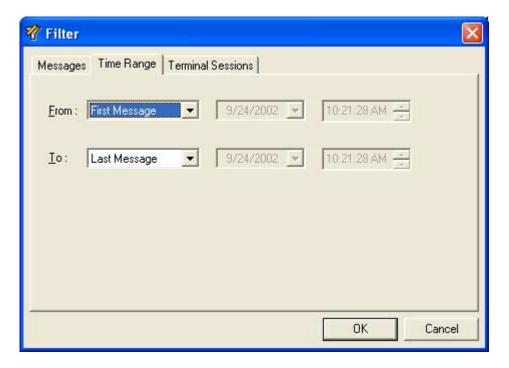
The **Messages** page provides two shortcut menus. When a category box is in edit mode, right-click in the box for Microsoft edit commands (for example, copy and paste). Right-click outside a category box in edit mode for the following commands:

• Clear Field: Use to erase the data in a category box. This command is only available when you right-click in a category box that contains data.

- Add: Use to add another row of filtering criteria. If you right-click the Type column, the new row is type Hide. If you right-click a category column, the new row is type Show. You can change this setting by clicking in the Type box for the new row. If you right-click in a category column, the box for that column is displayed in edit mode.
- **Delete**: Use to delete a row of filtering criteria. The row you right-click on is deleted.

You do not have to enable **Messages** filtering immediately. The filter specifications you configure on this page are ready for use at any time. Use the **Enable/Disable Message Filter** icon on the toolbar to toggle on and off the filtering criteria you have set.

Time Range Page



The **Time Range** page is comprised of the following options:

• From criteria: Use to set a beginning point for displaying messages in the Logger. Select between First Message and Messages On. Select First Message to display messages beginning with the first one stored in the current logfile. Select Messages On to enable the two boxes to the right in which you set a beginning date and time for messages you want to display. To change date and time settings, select any aspect of the displayed settings (that is, on the month, day, year, hour, minute, second or AM/PM) and type in the desired data. Click the down arrow in the date box to display a calendar in which you can select the desired date. Use the right and left arrows in the calendar to move between months. Also, you can select an aspect of the time box and use the up and down arrows to roll up or down to the setting you desire.



• To criteria: Use to set an end point for displaying messages in the Logger. Select between Last Message and Messages On. Select Last Message to display messages ending with the last one stored in the current logfile. Select Messages On to enable the two boxes to the right in which you set an ending date and time for messages you want to display. To change date and time settings, select any aspect of the displayed settings (that is, on the month, day, year, hour, minute, second or AM/PM) and type in the desired data. Click the down arrow in the date box to display a calendar in which you can select the desired date. Use the right and left arrows in the calendar to move between months. Also, you can select an aspect of the time box and use the up and down arrows to roll up or down to the setting you desire.

The filter specifications you configure on this page are immediately displayed in the time header of the details pane. If you used a **From** setting, the Start Time check box in the time header is automatically selected and the settings on this page of the Filter dialog box are shown. If you used a **To** setting, the End Time check box in the time header is automatically selected and the settings on this page of the Filter dialog box are shown.

Note This function does not delete logged messages, but only affects the display of messages in the message window of the Log Viewer. To view all logged messages again, clear the Start Time and End Time check boxes.

Terminal Sessions Page

The **Terminal Sessions** page is comprised of the following options:

- Data entry window: use this window to specify filtering criteria. The Session ID column maps to a column heading you can display in the message window. The Type column and its enabling check box determine whether the criteria set in the Session ID column is displayed (type: Show) or not (type: Hide). The first row (Console in the Session ID column) is not editable and cannot be deleted, although you can clear the Show check box. Click the Type box of a new row to toggle between Show and Hide, and double-click the Session ID box to type filter criteria. Click outside of the box you are editing to set that parameter. Data columns perform an OR operation (filter for messages that meet either criteria).
- **New Filter** icon: use to add a new row of filter criteria. After setting filtering criteria, the check box is automatically enable for that row.
- **Delete Filter** icon: use to remove a highlighted row of filter criteria.
- **Delete All**: use this button to clear all filter criteria from this page.

The **Terminal Sessions** page provides two shortcut menus. When a **Session ID** box is in edit mode, right-click in the box for Microsoft edit commands (for example, copy and paste). Right-click outside a **Session ID** box in edit mode for the following commands:

Clear Field: Use to erase the data in a Session ID box. This command is
only available when you right-click in a Session ID box that contains data.

Delete All

Cancel

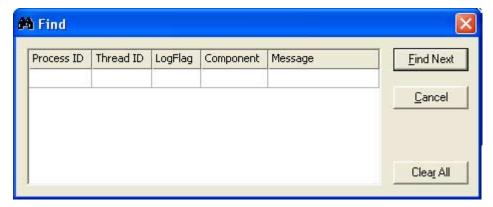
OK

- Add: Use to add another row of filtering criteria. If you right-click the Type column, the new row is type Hide. If you right-click a Session ID column, the new row is type Show. You can change this setting by clicking in the Type box for the new row. If you right-click in a Session ID column, the box for that column is displayed in edit mode.
- Delete: Use to delete a row of filtering criteria. The row you right-click on is deleted.

You do not have to enable **Messages** filtering immediately. The filter specifications you configure on this page are ready for use at any time. Use the **Enable/Disable Message Filter** icon on the toolbar to toggle on and off the filtering criteria you have set.

Find Dialog Box

Open this dialog box by clicking the **Find** command on the **View** menu.



Use the five search categories (**Process ID**, **Thread ID**, **Log Flag**, **Component**, **Message**) to search through messages displayed in the message window. These categories map to column headings in the message window.

Note The find function searches only through messages currently displayed. If you have applied a filter, only those messages are included in your search. If you want to search all logged messages, click the Enble/Disable Message Filter icon on the toolbar, and then run your search. Also, if you are currently viewing messages saved in a logfile, only those messages are included in your search. If you want to search runtime messages, select the node in the console tree under Default Group, and then run your search.

See "Searching for Messages" in "Using the Log Viewer" for a detailed procedure about using this dialog box.

The Find dialog box is comprised of the following options:

- Data entry window: Use this window to specify search criteria. The Process ID and Thread ID categories require numeric data; the others accept alphanumeric characters. Double-click a category box to type search data. Click Add on the shortcut menu to specify another row of search criteria. Data rows perform an AND operation (search for messages that meet both criteria). Data columns perform an OR operation (search for messages that meet either criteria). Use both AND and OR operations (multiple categories on multiple rows) to perform complex searches.
- **Find Next**: Click to search for the first message that meets the search criteria in the data entry window. Repeat to find the next message that also meets the search criteria.
- Cancel: Click to close the Find dialog box without searching for a message.
- Clear All: Click to erase all search criteria from the data entry window.

The Find dialog box provides two shortcut menus. When a category box is in edit mode, right-click in the box for Microsoft edit commands (for example, copy and paste). Right-click outside a category box in edit mode for the following commands:

- Clear Field: Use to erase the data in a category box. This command is only available when you right-click in a category box that contains data.
- Add: Use to add another row of search criteria. The column you rightclick on is displayed in edit mode.
- Delete: Use to delete a row of search criteria. The row you right-click on is deleted.

Go To Dialog Box

Open this dialog box by clicking Go To on the View menu.

Use this dialog box to go to a specific message in the message window that has been bookmarked.

Note You cannot go to bookmarked messages that are currently hidden by a filter. If you cannot find the desired message, disable filtering and try again.

See "Bookmarks Dialog Box" in this chapter and "Using Bookmarks" in "Using the Log Viewer" for more detailed information.

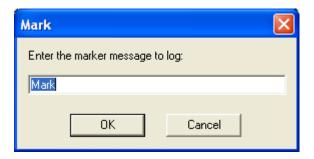


The Go To dialog box is comprised of the following options:

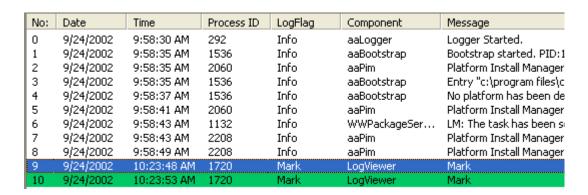
- Enter Bookmark Name: Type the desired bookmark or select one from the list.
- Go To button: Click to highlight the message in the message window with the bookmark you entered in the list at left. The Go To dialog box remains open.
- Previous button: Use to highlight the nearest bookmarked message above in the message window.
- **Next** button: Use to highlight the nearest bookmarked message below in the message window.

Mark Dialog Box

Open this dialog box by clicking the Mark command on the View menu.



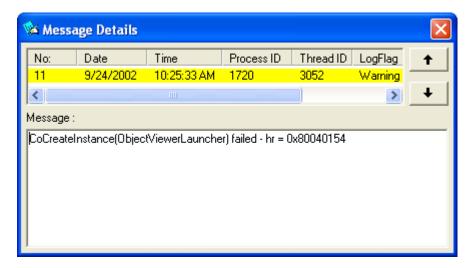
The text you type in the **Enter the Marker Message to Log** box is displayed in the **Message** column of the resulting marked message in the Logger. The marked message is a timestamped entry displayed in the message window. Default text is Mark. Two marked messages are shown in the image below.



Caution! When connected to a remote node, the **Mark** command places a message in the remote computer's logfile. If you do not want to make actual changes to the remote logfile, use the **Bookmark** or other Log Viewer commands that affect only your display of those messages and do not actually affect the remote logfile.

Message Details Dialog Box

Open this dialog box by double-clicking a logged message in the message window.



Use the five categories (**Process ID**, **Thread ID**, **Log Flag**, **Component**, **Message**) to search through messages displayed in the message window. These categories map to column headings in the message window.

Scroll through messages preceding and following the current message by clicking the up and down arrows.

Open Log File Dialog Box

Open this dialog box by clicking **Open LogFile** on the **Action** menu. The typical Microsoft open dialog box is displayed.

Use this dialog box to locate and open a logfile of saved messages. After you select the desired logfile and click **Open**, the saved log messages are displayed in the message window. The path and name of the opened logfile are displayed and highlighted in the console tree below **Opened Log Files**.



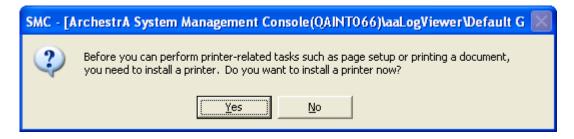
Note Opening a logfile does not affect the message logging process in the background, and you can view those messages by clicking Local or another node in the console tree.

When you are viewing an opened logfile, you can do filtering, searching, printing and exporting functions on the displayed messages. You can also insert and remove permanent bookmark into logfile. For instance, you can filter the displayed contents of the logfile and then export just that subset of messages to another logfile. After you apply a filter to the contents of a logfile, you must click **Refresh** on the **Action** menu to see the results.

Print Dialog Box

To print displayed log messages, click the **Print** command on the **Messages** submenu of the **Action** menu. The typical Microsoft Print dialog box is displayed.

If you do not have a printer installed, the following message is displayed.

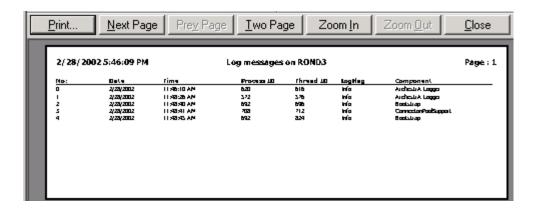


Click **Yes** to open the Microsoft print installation wizard or **No** to terminate printing.

If you prefer to preview the format of the printout before printing, click the **Print Preview** icon on the toolbar. See "Print Preview Screen".

Print Preview Screen

Open this dialog box by clicking the **Print Preview** icon on the toolbar. This icon is the only access to this function.



This screen's functionality is similar to the typical Microsoft print preview. Use **Next Page**, **Prev Page**, **Two Page**, **Zoom In**, and **Zoom Out** to navigate around the previewed data. Click **Close** to exit print preview and **Print** when you want to print the displayed data. Clicking **Print** opens the Microsoft print dialog box.

Purge Dialog Box

Open this dialog box by clicking **Purge** on the **Messages** submenu of the **Action** menu.

Use this dialog box to manually delete messages from the Logger.

Note Older messages are automatically purged when they meet the **Delete Log Messages Older Than ... Days** setting in the Configure dialog box.

Caution! We recommend that you export all logged messages before you use this function. Unlike the Log Viewer's filtering operation, which hides specified messages, the purge function actually deletes messages.



The Purge dialog box is comprised of the following options:

- Purge All Log Messages: Use this option button to delete all messages currently stored in the Logger.
- Purge Log Messages Created Before: Use this option button to enable the date and time boxes below, and set timestamp criteria for deleting logged messages. To change date and time settings, select any aspect of the displayed settings (that is, on the month, day, year, hour, minute, second or AM/PM) and type in the desired data. Click the down arrow in the date box to display a calendar in which you can select the desired date. Use the right and left arrows in the calendar to move between months. Also, you can select an aspect of the time box and use the up and down arrows to roll up or down to the setting you desire.



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