FOXBORO®

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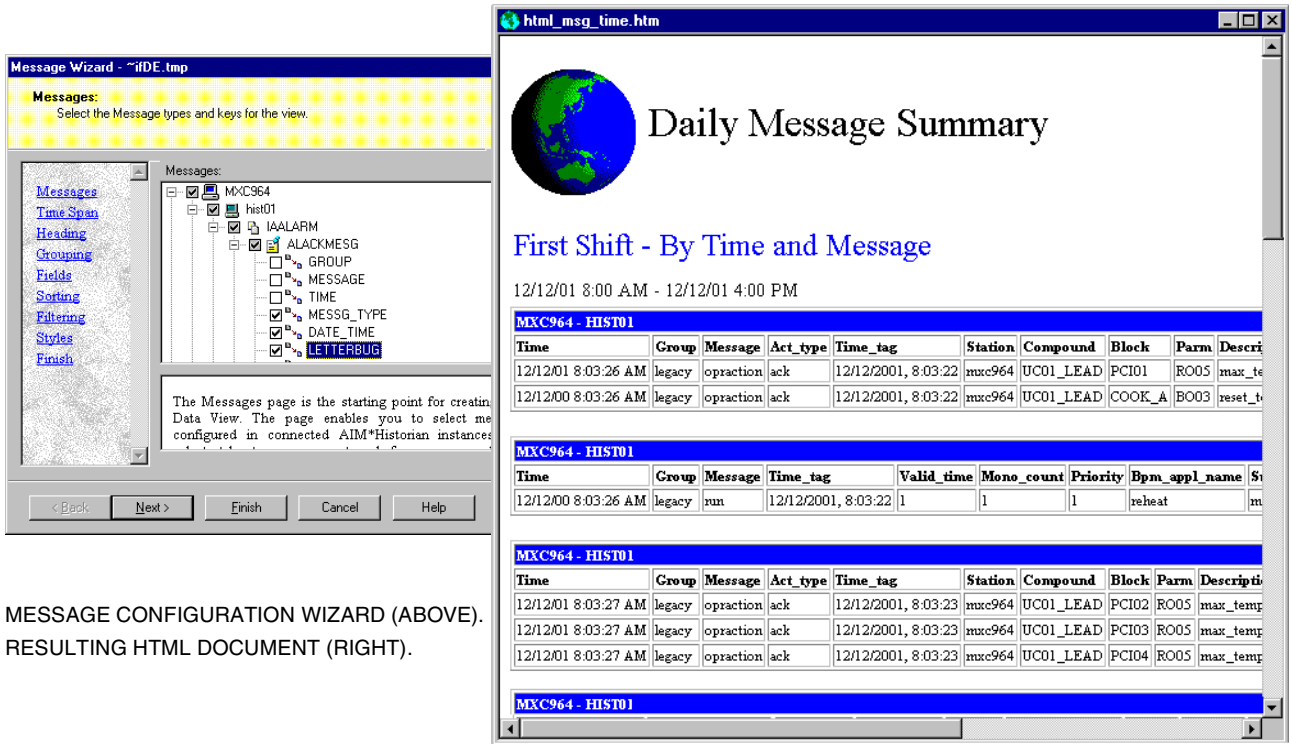
I/A Series® Information Suite
AIM*AT™ Alarm and Message Interface



MESSAGE CONFIGURATION WIZARD (ABOVE).
RESULTING HTML DOCUMENT (RIGHT).

AIM*AT Alarm and Message Interface (AIM*AMI) is a Windows® desktop application that enables you to retrieve alarms and other messages from I/A Series systems and make the messages available throughout the enterprise.

With AIM*AMI, you create HTML documents called Data Views that display retrieved data in a convenient tabular format. You can run the data retrievals on demand or schedule them to run automatically, each time updating the Data View HTML documents. The Data Views can be automatically stored on a networked PC or an I/A Series AW70/WP70 workstation. They can also be stored on a web server so they can be viewed by authorized individuals throughout the plant using a familiar browser such as Microsoft® Internet Explorer or Netscape® Communicator.

MESSAGE DATA VIEWS

AIM*AMI is a licensing of the Message Data View features of AIM*Inform. (AIM*Inform also provides Data Views of realtime data and process history.)

The software enables you to access the message databases of AIM*Historian instances and configure selective retrievals of the following I/A Series message types:

- Process Alarms
- Returns to normal
- Operator actions
- Sequence of events (SOE) messages
- System monitor alarms
- System monitor alarm returns to normal.

You can also retrieve event and error messages from various I/A Series and third-party applications such as batch programs and supervisory controllers.

The Data Views can be run on demand or as scheduled tasks, repeating at a set interval, such as once every hour. With each retrieval, AIM*AMI updates the HTML document. During configuration, you can insert a browser refresh command into the Data View that causes the browser to reload the Data View at a specific rate, and thus automatically update the display with the latest data retrieval.

Messages can be sourced from multiple historians. Retrieval time spans can be set with an absolute start and end time, or with a relative time, such as last hour, second shift, or previous seven days.

In addition to absolute and relative time spans, AIM*AMI offers a highly versatile and selective message retrieval capability, allowing you to select specific fields within a message type and include only messages that meet filtering criteria (such as messages for selected control processors). Once retrieved, the messages can be grouped into a single table or into multiple tables arranged by date and message type.

AIM*AMI enables the distribution of the selected messages to production supervisors, process engineers, maintenance personnel, as well as process operators.

AIM*AMI WINDOW

The AIM*AMI software offers a variety of interfaces, including an automation component, a command line interface, and web access using an Active Server Page (ASP). The principal interface for configuring the Message Data Views is the AIM*AMI Window. This graphical user interface includes the Data Center window, access to the Message Wizard for configuring Data Views, and tools for scheduling and managing server connections. From the Data Center, you can modify Data View configurations and execute retrievals. When you run a Message Data View, the resulting HTML document is displayed in a separate window and saved to the locations specified in the configuration.

DATA VIEW CONFIGURATION

The Data Center (Figure 1) lists existing Data View configurations and provides tools for setting program options and configuring additional Data Views.

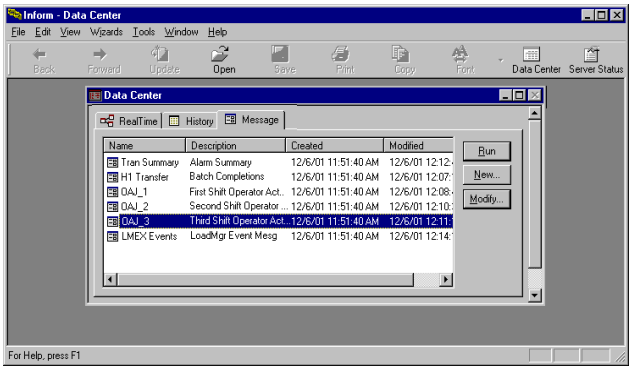


Figure 1. AIM*AMI Window and Data Center

The New and Modify buttons to the right of the listing start a configuration wizard for Message Data Views.

MESSAGE WIZARD

The Message Wizard, which includes convenient on-screen help, guides you through Data View development, which includes:

- Selection of messages to be retrieved
- Arrangement of data tables
- Formatting of HTML document appearance
- Specification of output options, such as printing and web publishing.

When you start the AIM*AMI software, it searches the network for AIM*Historian instances and identifies the messages configured for collection at each historian. When you start the wizard, the message configurations (historians, message groups, message types, and fields) are presented in a convenient tree view (Figure 2).

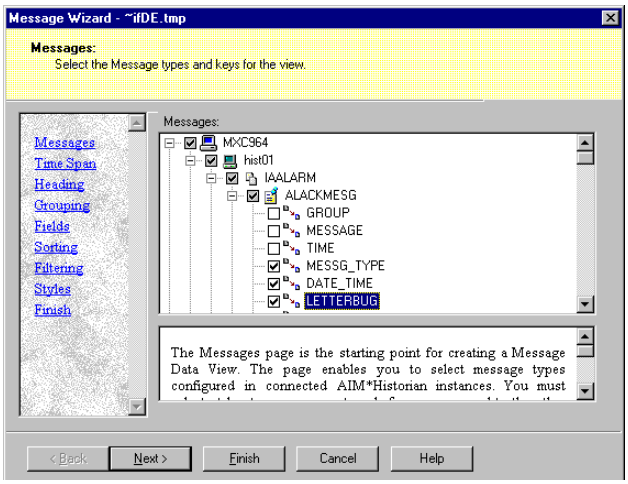


Figure 2. Messages Page

Quick Views

The Message Wizard supports quick configuration of Data Views using default styles, allowing you to browse and select message types and fields in a few clicks of the mouse. You select the fields with a simple drag-and-drop operation. You can then immediately run the configured retrieval and produce the Data View using default style selections.

Multiple Configuration Options

In addition to creating quick views, you can select other pages in the Message Wizard by clicking the page title in the Navigation Bar on the left side of the wizard.

These pages provide tools to arrange the data table, select style options, and specify how and where the Data View is to be accessed by others. Figure 3 and Figure 4 show the additional pages in the wizard.

The Message Wizard provides the following configuration options:

- Specifying a retrieval time span. The start and end of the span can be set with absolute times, or with variable times such as Last Shift or Previous Week.
- Ordering and renaming the data fields selected for each message type.
- Sorting of data by selected fields. You can specify up to four different sorts. The sort criteria can be set for all message types in a group or for individual types.
- Grouping of message data into separate tables by time or message type.
- Filtering the retrieved data to include only messages that match specific criteria.The filter criteria can be set for all messages types in a group or for individual types.
- Adding elements to the HTML page including titles and pictures, table rules and grid lines, and background patterns.
- Applying defined styles to the document background and data table.
- Formatting the appearance of the document by specifying the type style, size, and color.
- Configuring a Java or VB script to process the retrieved data before it is presented in the HTML document. This capability can be used to highlight specific conditions such as out-of-range values or to convert units of measurement and compute costs.
- Naming the Data View configuration and specifying how the document is to be stored.

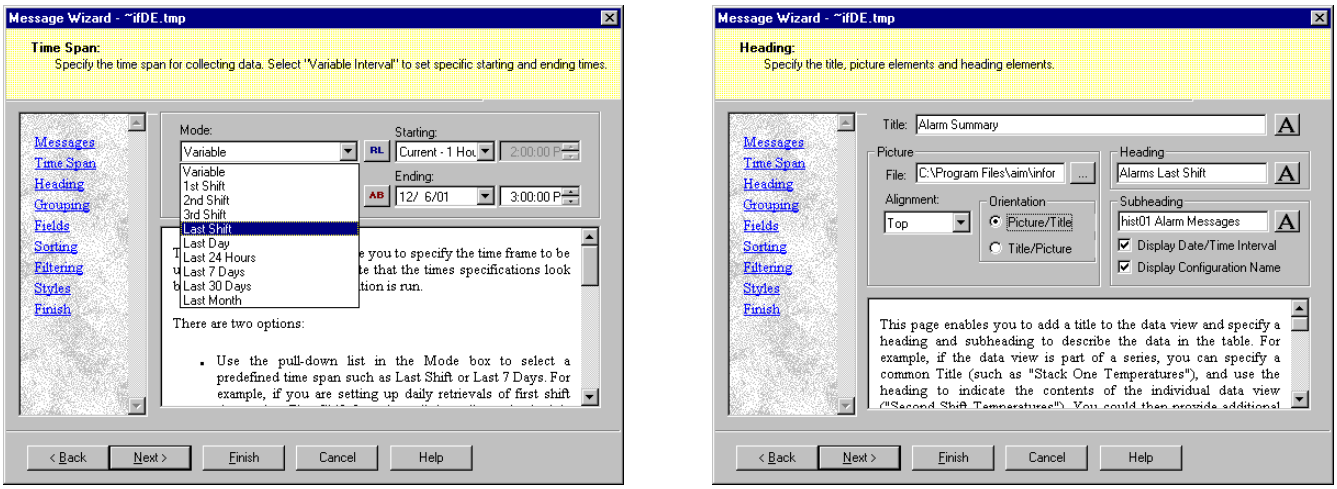


Figure 3. Message Wizard: Time Span and Heading Pages

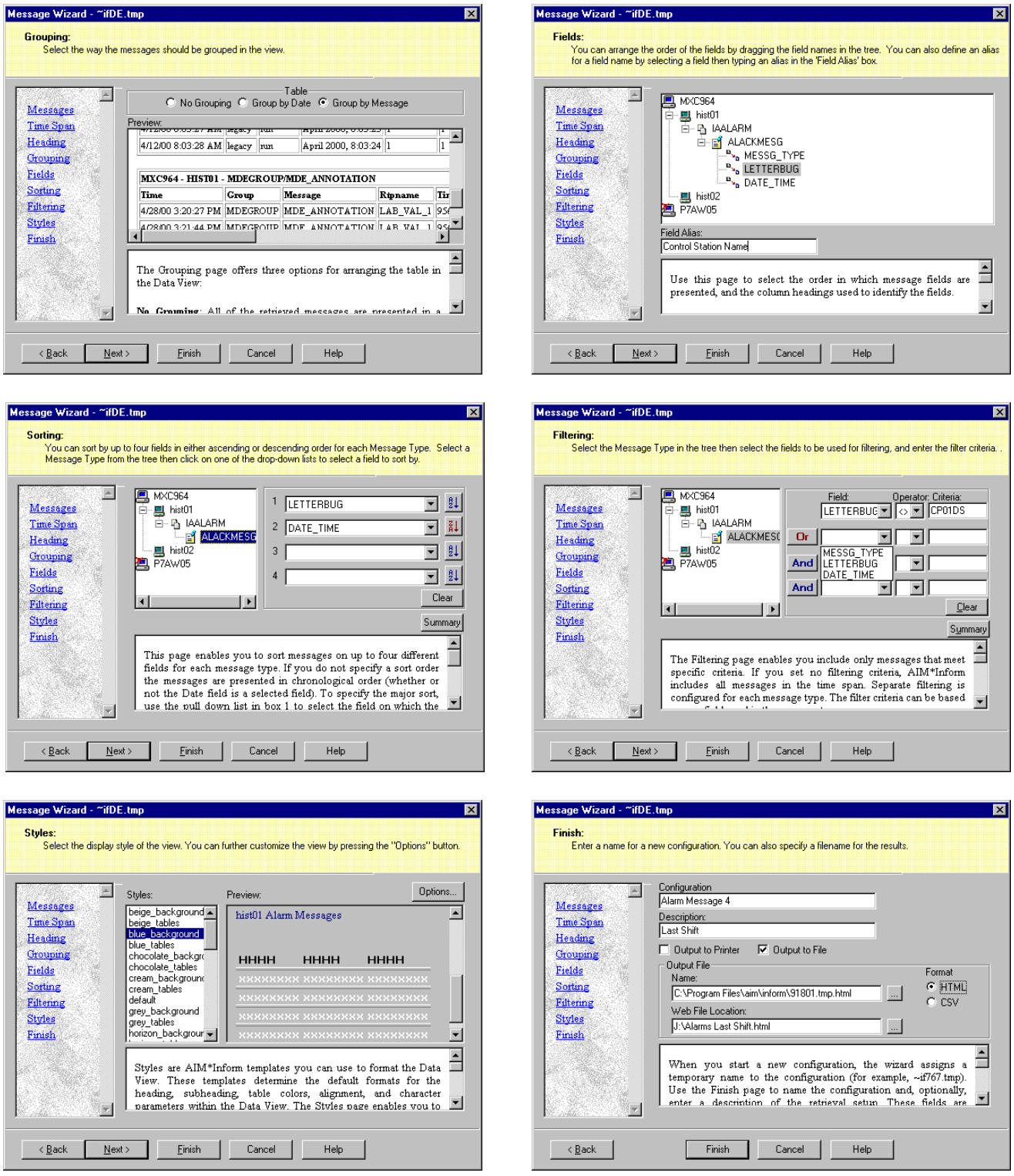


Figure 4. Message Wizard: Grouping, Fields, Sorting, Filtering, Styles, and Finish Pages

RUNNING DATA VIEWS

On Demand Execution

Once a Message Data View has been configured, you can run the data retrieval and create an HTML document by selecting the configuration and clicking the Run button. The Data View is displayed as configured in a separate window in the AIM*AMI window. You can open multiple Data View windows, tile or cascade the displays, and page through the active windows using the navigation buttons in the toolbar (Figure 5).

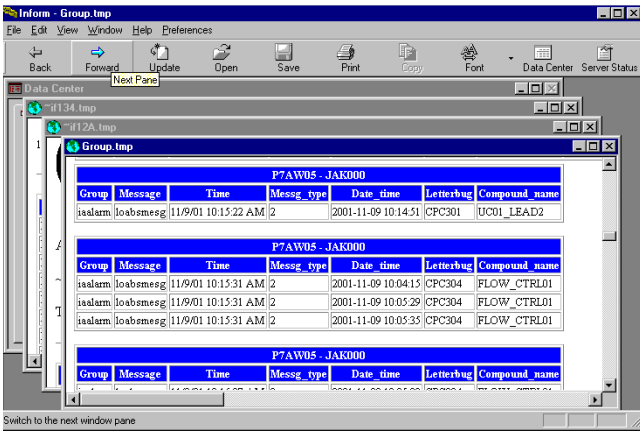


Figure 5. Cascade of Message Data Views

Each time data is retrieved, AIM*AMI creates a new Data View based on the specifications in the configuration file. If a storage location is specified for the Data View, the new document overwrites the previous file with each retrieval. For example, a Data View is executed every 15 minutes to retrieve Operator Action messages during the previous hour and is published to a web server; the document on the server is continually refreshed by AIM*AMI.

In addition to running Data Views from the AIM*AMI window, AIM*AMI provides the following ways to access the Data Center without opening the AIM*AMI window.

Scheduled Tasks

The Windows Schedule Wizard is invoked from the Data Center menu bar to schedule execution of a Data View. The Data View is run and stored as configured.

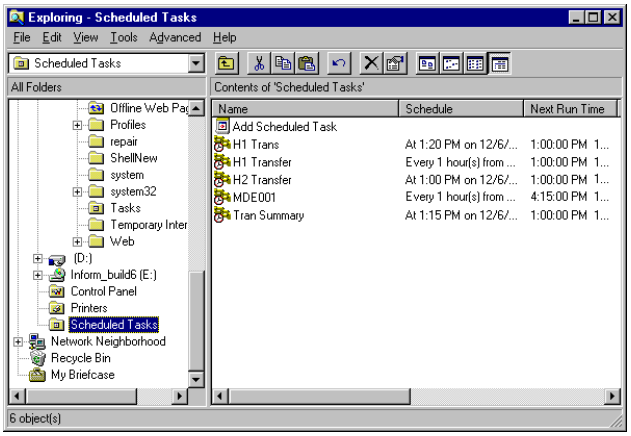


Figure 6. Scheduled AIM*AMI Data Views

Command Line Interface

The command line interface used by the scheduling task to run Data Views is also available for setting up scripts and shortcuts that run one or more Data Views without opening the AIM*AMI window. This interface also allows you to designate alternate storage locations for the resulting HTML documents.

Automation Component

The AIM*AMI automation component exposes a creatable application object for use in programs developed with C++, VB, and similar tools. The applications can list the Data View configurations available in the Data Center, change the retrieval time spans, specify alternate storage locations, and execute the Data Views. Use of the automation component does not alter the original Data View configuration.

Web Access to AIM*AMI

You can install AIM*AMI on a web server that uses Microsoft Internet Information Server, and run AIM*AMI from an Active Server Page (ASP). The ASP application uses the AIM*AMI automation component to list Data View configurations, change time spans and file locations, and execute Data Views.

STORAGE OPTIONS

You can store an active Data View to an HTML file on the AIM*AMI host computer. You can also apply any of the following automatic output options in the configuration wizard.

Output to a Printer

With each retrieval, the Data View document is sent to a printer which has been selected from the Data Center menu.

Output to a CSV File

This option stores a comma-separated ASCII file in the designated location so that the data can be used in spreadsheets and other applications.

Output to an HTML File

AIM*AMI automatically saves the HTML document to two locations:

- Folder on the host computer file system
- URL.

Sending the HTML document to a URL enables you to automatically publish Data Views as web pages.

INSTALLATION AND LICENSING

The AIM*AMI software is distributed on a single CD-ROM that contains runtime software, example files, an InstallShield® setup program, and updates to both AIM*AT server programs and to Microsoft Internet Explorer. Installation of the AIM*AMI software takes about five minutes.

Configuration of AIM*AMI involves entering an Invensys license code in the configuration files of the various AIM*AT servers to be accessed by the application. The code authorizes a set number of permanent users to access the server from the client application.

SYSTEMS REQUIREMENTS

Platform

PC running any of the following operating systems:

- Windows 95
- Windows 98
- Windows ME
- Windows XP
- Windows NT 4.0
- Windows 2000
- Windows Terminal Server.

AW70 running I/A Series software Version 6.1 or later.

Performance

350 MHz CPU or faster.
128 MB of RAM.
25 MB of storage.

Browser Software

Microsoft Internet Explorer 5.01 with Service Pack 2.
Microsoft Internet Explorer 5.5 with Service Pack 2.

Web Access to AIM*AMI Functions

Active Server Pages (ASP) on Microsoft Internet Information Server (IIS).

Server for Web Publishing Site

Microsoft IIS or similar software on a Windows or Solaris server.

Data Servers

AIM*AT Servers running Version 3.1 or later, and at least one AIM*Historian instance configured for message collection.

Communication

TCP/IP connections to the AIM*AT Servers.

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MB 021 Printed in U.S.A. 0102